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THIRTY-EIGHTH ANNUAL REPORT

OF THE

State Board of Health

OF

SOUTH CAROLINA

FOR THE

63 Fiscal Year, 1917

TO THE

LEGISLATURE OF SOUTH CAROLINA

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STATE DOCUMENTS

COLUMBIA, S. C.
CONZALES AND BRYAN, STATE PRINTERS,
1916.

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LETTER OF TRANSMITTAL.

January 2nd, 1918.

His Excellency Richard I Manning, Governor, Columbia, S. C.

Sir: I have the honor to submit for your consideration the Thirty-eighth Annual Report of the Executive Committee of the State Board of Health.

The extraordinary condition created by the establishment by the United States Government in South Carolina of several cantonments with the sudden importation of large numbers of soldiers from various States has complicated necessarily the health problems with which we have to deal. In order to conserve the health of communities adjoining these cantonments sanitary zones have been created around each having an area not less than five miles wide at any point in which strict sanitary requirements are rigidly enforced relating to milk and milk products, public food receptacles and utensils, public water supplies, disposal of human excreta and sanitation of food depots. These emergency sanitary zones are under the charge of Dr. F. Simpson, P. A. Surgeon, United States Public Health Service.

The great increase in the prevalence of measles which will be noted from the report of the health officer is due to the importation of the disease by soldiers who have spread it among the civilian population. Our statistics show that there have been reported 146 deaths from measles and 388 from broncho-pneumonia following measles, making a total of 534 deaths as a result of this cause.

Another disease of which there is a serious danger of an increase is epidemic cerebro-spinal meningitis. The mortality from this disease is always high, but it has been reduced very greatly when facilities are provided for an early diagnosis and the prompt administration of the curative serum. The State Health Officer has in contemplation the equipment of a traveling laboratory, which will enable him to make diagnosis at the bedside, and we earnestly hope that the General Assembly will provide sufficient funds for the purpose of carrying out this plan and so enable the Board of Health to deal promptly and effectively with any threatened outbreak.

We are glad to invite your attention to the reduction in the number of deaths reported from diphtheria, infantile paralysis, scarlet fever, typhoid fever, whooping cough, pellagra and tuberculosis.

The growing interest in the State Sanatorium for the treatment of tuberculosis is most gratifying and the increasing popularity of this institution is due in large measure to the untiring efforts of the Field Secretary, Mrs. Annie I. Rembert. This great work should receive unstinting support. Only a beginning has been made so far, but there is every reason to expect the Sanatorium to become one of the most useful of our State institutions, and inasmuch as tuberculosis may be cured if taken sufficiently early, money expended upon the maintenance of such an institution which restores to useful lives men and women who without its protecting care would become in increasing measure burdens upon their families and upon the State, is money invested, and invested at a high rate of interest because it is calculated in terms of human life.

The work of the Board of Health includes problems such as drainage, sewage disposal, water supplies, etc., which require the trained knowledge of an expert engineer, and your attention is invited earnestly to the suggestion of the State Health Officer that such an officer be provided for in the budget this year.

The large number of recruits who have been found physically deficient under the rigid physical examinations required for entrance into the army demonstrates the urgent need of medical inspection and examination of school children. It will be the part of far-seeing wisdom to put into operation measures to safeguard the health of the school children and to weed out the defectives, for the children of today will be the men and women of tomorrow upon whose shoulders will fall the burden of solving the complicated problems of our social and economic life.

The increased cost of living due to prevailing conditions should be considered in providing the salary budget for the coming year. It is almost impossible to maintain an adequate scale of living upon the salaries which our employees are receiving at present and we trust that it will be possible to provide for a just increase.

Respectfully,

ROBERT WILSON, JR.,

Chairman Executive Committee, State Board of Health.

GENERAL REPORT.

This is the Thirty-eighth Annual Report of the Executive Committee of the State Board of Health, and is for the year ending December 31st, 1917.

This report is made in compliance with the following Concurrent Resolution, which directs that the "Reports of the Departments of the State Government, and every officer required by law to be made to the General Assembly, or to any officer, the printing of which is to be charged to the State, shall contain only a concise statement of the transactions of the officer of department, without repetition, and a concise statement of recommendations, and no proposed measure or copy of law, or copy of any other report or document, except such as the production of which shall be necessary, shall be printed at the expense of the State," etc.

EXECUTIVE COMMITTEE STATE BOARD OF HEALTH.

Robt. Wilson, Jr., M. D., Chairman.....	Charleston
D. B. Frontis, M. D.....	Ridge Spring
C. C. Gambrell, M. D.....	Abbeville
E. A. Hines, M. D.....	Seneca
W. J. Burdell, M. D.....	Lugoff
Wm. Egleston, M. D.....	Hartsville
W. M. Lester, M. D.....	Columbia
W. W. Dodson, M. D.....	Greenville
Thos. H. Peeples, Attorney General.....	Columbia
C. W. Sawyer, Comptroller General.....	Columbia
Jas. A. Hayne, M. D.....	
Secretary and State Health Officer, Columbia	

STAFF OF SOUTH CAROLINA DEPARTMENT OF HEALTH EXECUTIVE DEPARTMENT.

Jas. A. Hayne, M. D., Executive Officer of State Board of Health.

J. P. Tompkins, Clerk.

John Roundtree, Janitor.

RURAL COMMUNITY WORK.

L. A. Riser, M. D., Director.
 E. W. Grieshaber, Stenographer.
 F. M. Routh, M. D., Field Director.
 V. W. Brabham, M. D., Field Director.
 L. H. Smith, M. D., Field Director.

HEALTH INSPECTORS FOR RURAL COMMUNITY WORK.

R. C. Roof, W. F. Trasher, Chas. Faris, Butler Heron, T. B. Sims, L. B. Kennedy, E. G. Able, W. P. Whetsell, E. D. Delk, R. H. Lawton, E. J. Wannamaker, Jr., J. H. Spann, B. D. Ward, W. J. Cauthen, W. S. Whitaker, L. J. Rasche, G. L. Quattlebaum, F. M. Cain, Leigon Young, J. H. Young, Rupert Young, Braxton Davis, M. S. Brown, W. A. Washington.

LABORATORY DEPARTMENT.

F. A. Coward, M. D., Director.
 H. M. Smith, M. D., Assistant.
 Jas. R. Cain, Assistant Bacteriologist.
 M. C. Davis, Stenographer.
 F. L. Parker, M. D., Chemist and Bacteriologist, Charleston.

BUREAU OF VITAL STATISTICS.

C. W. Miller, Chief Clerk.
 P. T. Washington, Filing Clerk.
 C. L. Cain, Index Clerk.
 E. M. Rouquie, Stenographer.

SOUTH CAROLINA SANITORIUM.

Ernest Cooper, M. D., Superintendent.
 Clara Wood, Matron.
 A. T. Painter, Nurse.
 A. I. Rembert, Field Secretary.
 Servants.

MEETINGS.

The Executive Committee of the State Board of Health, in addition to its regular quarterly meetings, held two special meetings.

THE BOARD'S QUARTERS.

The Executive Department of the State Board of Health occupies rooms on the fifth floor of the Palmetto Bank building.

The Laboratory has well arranged rooms furnished by the University of South Carolina, steam-heated and comfortable, in LeConte College.

The Bureau of Vital Statistics also occupies, through the courtesy of the University of South Carolina, comfortable quarters in LeConte College.

The South Carolina Sanatorium for the treatment of tuberculosis is at State Park, eight miles from Columbia.

MISCELLANEOUS.

The year 1917 will be a memorable one in the annals of the State Board of Health for, for the first time in the history of that Board has the State been at war. Many new and complicated situations have been created by the importation of workmen and soldiers from other States. Three camps for the army have been built, and at least 30,000 laborers have been constantly employed for the past six months. Soldiers from many States of the Union have been brought into these camps, bringing with them many kinds of contagious diseases. The laborers and soldiers have, of course, mingled freely with the civilian population of the counties in which the camps have been established. As a consequence certain diseases, such as measles and meningitis have been on the increase. In spite of these conditions the Executive Committee of the State Board of Health is proud to report that deaths from contagious diseases have been less than last year, with the exception of measles. Measles has been epidemic since the first concentration of soldiers and laborers in this State, due as Gen. Gorgas has stated, to the drafting of men from isolated communities in the mountains of North Carolina, South Carolina and Tennessee who had never been exposed to this disease, and, consequently, soon fell a victim to it. They in turn carried it to the non-immune persons in the civilian population. Last year there were ten (10) deaths attributed to measles, this year there have been one hundred and forty-six (146). Of course, this does not at all represent the number of deaths from this disease, as broncho-pneumonia quickly follows measles in adults, and the death certificates will show broncho-pneumonia as the cause of death, and not measles.

We are extremely proud of our record in regard to diptheria, there having been only forty-seven (47) deaths in ten months from this disease. This has been due to the intelligent laws passed by the General Assembly, and the generous appropriation for the distribution of anti-toxin free to all citizens of South Carolina.

We are glad to report that there have been no deaths from smallpox in the State this year.

Pellagra which at one time, only two years ago, was second in our list of diseases which have caused deaths in South Carolina, now shows a death rate of only 544. This, of course, is entirely too high, but we believe that the constant education of the people in right living, personal hygiene and proper sanitation with the education given by the farm demonstrator as to the proper methods of farming, conservation of foodstuffs, and what constitutes a properly balanced food ration has done much to eradicate this dreadful disease, which not only frequently robs the patient of his life, but often a worse calamity befalls him, namely, loss of his reason. The intelligent care and management of the State Insane Asylum has done much towards lowering the death rate from this disease.

Last year we had an epidemic of anterior poliomyelitis or infantile paralysis with 129 cases, this year there were only 13 cases with 8 deaths. We are certainly to be congratulated on not having had an epidemic of this disease this year—which cripples little children and renders them unfit for the burden of life.

The trench warfare which we are continually waging against tuberculosis is slowly nibbling territory from the enemy, and although this disease is still king of all diseases, we can report good progress. The deaths this year being 1356 against 1377 last year and 1735 in 1915. To win against tuberculosis means organized, constant effort in every community in South Carolina. To obtain this it is necessary to have trained personnel usually consisting of nurses specially educated in the abating of this disease. These nurses visit the homes where tuberculosis exists, and show the patient and their family how to prevent the spread of the disease. They help to protect the children, especially the very young children from this disease. It is more and more being accepted as a fact by scientific men that tuberculosis is contracted in infancy and early childhood, and that if special care is taken to protect infants and young children from those who have the

disease, tuberculosis can be stamped out. A great many cases of tuberculosis are contracted from the use of milk from tubercular cows, and the safeguarding of the milk supply is one of the most important problems in our fight. Rural communities are prone to use milk from any cow that the family may happen to possess. These cows are seldom if ever tuberculin tested. The negro population is especially susceptible to tuberculosis, and offers very little resistance to the disease. The State Board of Health has put on in conjunction with the South Carolina Anti-tuberculosis Association an intensive campaign to sell Red Cross Christmas Seals in sufficient quantities to have funds to employ trained nurses, and also to have clinics where the early diagnosis of the disease can be made for the poor.

Through the generosity of the last Legislature, we are able to report that we have the South Carolina Sanatorium situated seven miles from Columbia, which, though small, is considered by experts to be one of the best equipped sanatoria to be found in the South. Our new infirmary and dining-room have all modern improvements. The buildings are steam-heated and electrically lighted with our own electric plant. Situated as it is on a high ridge of the sand hills, with perfect drainage, and a climate that offers every opportunity for the maximum of sunshine, we feel that we can unhesitatingly recommend this institution as the best place in South Carolina, or any other Southern State, where a person can recover from this disease, if they go there in time. A full report of this institution will be found elsewhere in this volume.

The United States entering into this war, which is a war of nation against nation, and not of army against army alone, brings forcibly to the mind of every thinking person the necessity of conserving our man power, and your Board of Health feels that the gravest responsibility rests upon its shoulders during this crisis in the nation's history. How best to meet this emergency has engaged our attention all this year. We are handicapped by lack of funds. The total appropriation for the State Department of Health is seemingly large, but when you analyze this appropriation, you will find that the major portion of it is for buildings for the Tuberculosis Sanatorium, and for the free distribution of necessary antitoxins and serums for the cure as well as the prevention of disease, leaving but a small amount for the actual working out of plans for the preservation of health of

the citizens. Among the things that we need badly is a trained sanitary engineer. The problems of a modern board of health involve so many engineering problems that the Board is crippled in its usefulness by not having an expert in this line as one of its personnel. The great problem of seeing that the cities and towns of South Carolina are supplied with pure water, that they have the best methods of sewage disposal, and that intelligent projects for drainage to prevent malaria—all should be under such an expert. We hope that such help may be granted to us by this Legislature, and that we may have added such an employee as a part of the proposed budget for the Department of Health this year.

The educational work of the Board is being carried out by the distribution of bulletins on the following subjects:

BULLETINS.

The following bulletins have been issued by this department and sent out all over the State:

Anterior Poliomyelitis (Infantile Paralysis).

Baby Welfare.

Cancer.

Clean Milk in the Home.

Clean-Up Day.

Diphtheria.

Epidemic Cerebro-spinal Meningitis.

Hookworm.

House Fly.

Measles.

Medical Inspection of Schools.

Pellagra.

Rabies (Hydrophobia).

Sanitation in Small Towns.

Scarlet Fever.

Smallpox.

The Backward Child.

The Mosquito.

Safe Disposal of Human Excreta.

Tuberculosis.

Typhoid Fever.

Whooping-cough.

The bulletin on the Backward Child, Care of the Eyes, etc., should be read by the Legislature with care, for it offers unanswerable argument for the medical inspection of schools. In the preservation of the man-power of this State no single factor is of greater importance than this, namely, that a child should be intelligently examined when it enters school, and any defects found that can be remedied should be made known to the parents, and the facilities offered by the State or municipality for the carrying out of the recommendations made by the examiners should be utilized. Many children are handicapped by defects which could easily be remedied, and they are thus prevented from attaining that position in the life of the commonwealth which they otherwise would achieve.

We again call your attention to the fact that the State Health Officer has no assistant, and that he can not properly attend to all the calls that are made upon him in this large State, and also that the clerical force of this office consists of one clerk, paid by the State of South Carolina at the miserable pittance of \$60.00 per month. A clerk, who in addition to the extensive bookkeeping required by the expenditure of approximately \$75,000.00 has to do a great deal of other clerical work, such as the tabulating of communicable diseases, sending out of diphtheria anti-toxin and other serums, and who was recommended, without request, on her part, by the State Auditor at a salary of at least \$1,000.00 per annum. Surely when the Legislature considers what it costs to live, they will not be so niggardly as to pay \$2.00 a day for skilled clerical help, when an ignorant negro carpenter, God save the mark, is paid from \$4.00 to \$6.00 a day by the United States Government.

The State Department of Health now consists of four distinct departments, of each of which we are justly proud. They are the Laboratory Department, under Dr. F. A. Coward; the Department of Rural Sanitation, under Dr. L. A. Riser, who last year received the degree of Doctor of Public Health from Tulane University; the Department of Vital Statistics, under the State Health Officer, with W. C. Miller, chief clerk, and the newly created extra camp and cantonment areas in South Carolina under Dr. Friench Simpson, P. A. Surgeon, United States Public Health Service. Dr. Simpson has under him three well organized forces; Dr. H. C. Cody being at Spartanburg and Dr. D. J. Prather being at Greenville, and they are constituted under

the following resolution of the Executive Committee of the State Board of Health, and will look after the emergency zones around the cantonments and camps in South Carolina. We hope to make these zones object lessons in public health for the rest of the State. At present the United States Government and the Red Cross is furnishing the funds, but it is probable that the State will be called upon to do its share during the coming year.

Resolved: The State Board of Health of South Carolina, being informed that certain areas within the State of South Carolina, which have been accepted, set aside and defined by the United States Government as "camps and cantonments," are being rapidly occupied by soldiers of the army as training camps, and that as a result there is occurring marked congestion of the population in and within the vicinity of certain inhabited areas adjoining such camps and cantonments, and having knowledge that such congestion will promote the occurrence of and increase the spread of communicable diseases in such areas, the Executive Committee of the State Board of Health of South Carolina, in accordance with Act No. 419, of the General Assembly of the State of South Carolina, deems it wise and necessary at this time to enact and enforce, as an addition to the regulations contained in the Sanitary Code of South Carolina, certain emergency sanitary regulations to be applied within the vicinity of all such camps and cantonments, for the better protection of the health of the citizens of such communities, and for the better protection of the soldiers occupying such camps and cantonments.

Therefore, wherever in the State of South Carolina the United States Government has accepted, defined and declared a certain area to be a camp, or cantonment, and is occupying and using such area for the purpose of housing, training, or caring for soldiers; or wherever in the future such camps or cantonments as above defined may be established, and arbitrary area in the form of and defined as a zone, not less than five miles in width at any point, extending completely around every and all such camps or cantonments and including all circumscribed territory not under the jurisdiction of the Government, for the purpose of and within the meaning of the regulations hereinafter to be defined, shall be known as

"an emergency sanitary zone," and there shall apply to and be enforced within all such emergency sanitary zones the following sanitary regulations relating to (1) milk and milk products; (2) public food receptacles and utensils; (3) public water supplies; (4) disposal of human excreta; (5) sanitation of food depots.

Epidemic Diseases.

Measles have been rampant during this year. Like flames in broom sedge they have devoured the non-immune population of this State, and very little can be done to prevent this. We simply wish to offer this warning: that measles is a most treacherous and dangerous disease, that it not only frequently kills from broncho-pneumonia, but that in early adult life it germinates the seeds of tuberculosis which are present in the bronchial glands of the majority of young adults, and that as a result there is an increase of tuberculosis among the people. Its long period of incubation, and the fact that it is contagious before the eruption makes its appearance makes it an extremely difficult disease to control by quarantine. The mischief invariably having been done before the diagnosis is made.

We have adequate laws for the protection of school children, if we can succeed in teaching the teachers and trustees of schools of the necessity of obeying these laws which are made for the protection of the school children. We hope to present to your body this year a bill to have better reporting of contagious diseases. At present the reporting of contagious diseases is a farce.

Vital Statistics.

We have succeeded in being admitted to the Registration Area of the United States for vital statistics, and our figures are now officially recognized by the United States Government for deaths in this State. We consider this a great achievement. We hope to be admitted to the recognized area for births during the coming year. This department is small, but has done most excellent work. All reports of births and deaths are bound in volumes, and card indexed so that there is no difficulty in ascertaining any birth or death which has occurred in this State since the establishment of this Bureau. This will later greatly facilitate the carrying out of laws in which the age of a person is called into

question. The State has been much praised for its enterprise in obtaining accurate returns of vital statistics, and we are constantly in receipt of letters from other States commending us for the economical manner in which we have done this work, our appropriation being less than any other State that has vital statistics.

Laboratory.

This work has continued to grow under the able administration of Dr. F. A. Coward, Director, and his report shows the tremendous amount of work done by his small force. The Wassermann test, which our laboratory does free for all physicians requesting, has been of great benefit in finding out whether syphilis is present or not, and thus enables the physicians to intelligently treat their patients. We hope that the Legislature will recognize the importance of this work and give us a larger appropriation. We continue to make typhoid bacterin, Pasteur treatment, and examine miscellaneous specimens of blood, sputum, etc., and Dr. Coward's report shows that this work is increasing.

Department of Rural Sanitation.

This work carried on under Dr. L. A. Riser has grown to be one of the most important departments, if not the most important, of the State Board of Health work. It reaches the people in their homes, and is appreciated by them. Orangeburg and Greenwood Counties, and parts of Richland have been intensively worked this year and good results obtained. We are asking this year for double the appropriation of last year. The International Health Board has appropriated \$14,500.00 for this work, which is one of the largest appropriations made by them for any Southern State. They, of course, require that we put up an equal amount, and we feel sure that every dollar expended by the Legislature on this work will not only meet with approval of the people, but will be of great benefit to them. Dr. Riser's comprehensive report found elsewhere in this volume deserves to be carefully read by the General Assembly as it will give an insight into the work proposed.

Executive Department.

The executive department under the State Health Officer has correlated the work of the three departments named above, and

has also attended to the clerical work of the office, the distribution of diphtheria anti-toxin, smallpox virus and other serums, abating epidemic and contagious diseases whenever reported, examining into the sewage disposal of cities and towns, and had careful supervision of the water supplies of cities and towns having public water supplies, giving advice generally on all subjects pertaining to public health, delivering many lectures and sending out a large amount of literature of educational character. The State Health Officer has attended medical meetings and conferences on matters pertaining to public health, and served on many important committees of various medical societies. The principal among which is the National Committee on the Eradication of Malaria in the Southern States. A concise report of the trips made by the State Health Officer is appended.

Foods and Drugs.

The pure food and drug law in South Carolina is carried out by the Department of Agriculture, Commerce and Industries, under rules and regulations adopted by the Executive Committee of the State Board of Health; in other words, it is charged with the enforcement of the law, and the State Board of Health with the making of the rules and regulations. This work has been well done in the past by the Agricultural Department, but we believe that a stringent law should be enacted by the Legislature for the prevention of the sale of worthless patent medicines containing no medicinal properties, and being simply a method of selling alcohol to the public. We have prohibition, let us be consistent, and not allow the sale of whiskey or alcohol, no matter under what label it is sold.

REPORT ON EPIDEMIC AND CONTAGIOUS DISEASES OCCURRING IN SOUTH CAROLINA DURING 1916, BY JAS. A. HAYNE, CHAIRMAN OF COMMITTEE.

Smallpox.

This disease is probably the main reason for the establishment of the State Board of Health and its maintenance, for when this Board was constituted it was the greatest menace among all of

the epidemic diseases. Now, owing to compulsory vaccination of school children, which is being carried out better and better each year there were 236 cases with two deaths. From the 1st of January to the 1st of December we have distributed vaccine virus as follows: 11,130 points at 6 1-2 cents per point, and 13,550 points at 4 1-4 cents per point, at a total cost of \$1,399.32.

The following doctors have been appointed as special agents for the State Board of Health, under Section 2 of Act 434, approved the 22nd day of February, 1905: John D. Colson, St. Stephens, S. C.; O. H. Eve, Beech Island; J. T. Howell, Hartsville, S. C.

Scarlet Fever.

This disease is endemic in certain counties, and although mild in character, there have been six deaths in the State this year put down as scarlet fever. It is probable, however, that there were many other deaths due to sequelae of this disease, which are not attributed to scarlet fever on the death certificates. Isolation of the patient for four weeks from the onset of the disease, and until all abnormal discharges have stopped and all open sores have healed, and also exclusion of exposed susceptible children and teachers from school, and food handlers from their work, until five days have elapsed since last exposure to a recognized case. The following general measures should be carried out in the face of an epidemic: (1) Daily examination of exposed children and of possibly exposed persons for a week after last exposure. (2) Schools should not be closed where daily observation of the children by a doctor or nurse is available. (3) Education as to special danger of exposing young children to those exhibiting acute catarrhal symptoms of any kind. (4) Pasteurization of milk supply. By carrying out these rules we can save many lives and much anxiety on the part of parents and relatives. From January to December scarlet fever was reported to be in the following counties: Anderson, 1; Charleston, 9; Chester, 1; Chesterfield, 1; Fairfield, 1; Florence, 8; Greenville, 23; Laurens, 1; Newberry, 16; Pickens, 1; Richland, 49; Spartanburg, 17; Sumter, 2; Union, 1; York, 3; making a total of 134. This, of course, does not at all represent the number of cases occurring in this State, but is all that have been reported to this office. Some of these days non-reporting of contagious diseases will be recognized as a serious crime against society, and will be so punished.

Diphtheria.

We are very proud of our report on diphtheria. We have had but 47 fatal cases in the State, but there have been entirely too many cases, and if it were not for the prompt use of diphtheria anti-toxin, instead of reporting 47 deaths we would have probably had 400. It is probable that unrecognized naso-pharyngeal cases with a discharge from the nose and no other symptoms are responsible for the spread of this disease, and if we had medical inspection of schools done at frequent intervals, many of these cases would have been discovered and prevented from conveying the disease to other children.

The following table shows the monthly incidence, by counties, of cases diagnosed as diphtheria and receiving the antitoxin:

Counties.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	Total.
Abbeville	1	5	2				5		5			18
Aiken	8	23	7	1	5	6	3	1	1	7	10	28
Anderson								9		1		77
Bamberg			3	1		1	1	1		4		11
Barnwell	1							4	13	4	17	39
Beaufort				2	1	2		1	9	2		17
Berkeley												0
Calhoun						1						1
Charleston	20	23	5	8	5	12	1	8	16	34	45	177
Cherokee		8				3					5	15
Chester						3		4	3	6	11	26
Chesterfield	2	3					1			4	2	14
Clarendon						1						1
Colleton												0
Darlington	1		1		1	6	1	10	4	3	3	30
Dillon	6		3	1		4		5	7	8	3	37
Dorchester	1		1	3	2	2	3	2	1	5		20
Edgefield	1		1			2						4
Fairfield												0
Florence	3	14	3	4	2	6	1	10	7	16	7	73
Georgetown			1		1				4		2	8
Greenville	5	2		1	8	2	2	2	6	4	2	34
Greenwood	4	1	3	6	3	3	4	5	3	3	1	36
Hampton	1	2			1					1	4	9
Horry			6							1	1	8
Jasper												0
Kershaw	3				4	3		3	5			18
Lancaster						5						5
Laurens					2	1		4	1	3	3	14
Lee	2	1						11	8	1	3	26
Lexington	7		11	2		1		8	5	11	9	54
Marion	1				2			1	7	10	5	26
Marlboro	1	2	1			2		2	5	11	5	29
Newberry	2		1		3	1		1	11		2	21
Oconee	2	4	3	2	4	1	3	2	4	5	9	39
Orangeburg	1	3	1	1	2		1	4	13	9	14	49
Pickens	1	2	1	1	1	1		3	10	4	2	25
Richland	9	1	5		18	8	7	17	21	14	25	125
Saluda		4		3		5	4	9	7	9	3	44
Spartanburg	6	2	2	10	3	2	3	4	4	19	8	63
Sumter		1	1	2	2	3	3	4	17	15	9	57
Union		14	11	5			1	2		11	3	47
Williamsburg	3	1		2						2	1	10
York	3				5	4	2		10	9	4	37
Total	96	116	72	55	75	94	48	137	216	236	227	1372

The December reports for diphtheria came too late to be tabulated, but are as follows:

Aiken, 2; Anderson, 11; Bamberg, 1; Charleston, 13; Cherokee, 1; Chester, 4; Chesterfield, 2; Darlington, 2; Dillon, 2; Dorchester, 2; Florence, 3; Georgetown, 4; Greenville, 1; Greenwood, 1; Hampton, 1; Horry, 1; Lee, 1; Lexington, 1; Marlboro, 9; Newberry, 5; Oconee, 2; Orangeburg, 12; Richland, 16; Saluda, 5; Spartanburg, 6; Sumter, 3; Union, 9; York, 1.

Total number of cases reported during December, 140.

The amount of diphtheria antitoxin consumed as compared with 1916 is as follows:

1916	1,000 Units	3,000 Units	5,000 Units	10,000 Units	1917	1,000 Units	3,000 Units	5,000 Units	10,000 Units
January	70	49	109	9	January	58	33	95	38
February	73	103	151	13	February	25	11	81	25
March	63	56	90	19	March	33	20	97	29
April	28	27	92	10	April	45	18	81	29
May	11	26	66	5	May	23	22	87	26
June	50	33	67	13	June	48	30	133	29
July	42	40	69	9	July	38	30	46	15
August	200	106	209	31	August	146	79	210	64
September	337	186	442	92	September	181	90	226	99
October	310	131	383	116	October	193	96	312	130
November	49	49	154	53	November	194	114	252	169
December	158	77	245	71	December	103	40	116	100
	1,391	883	2,077	441		1,087	583	1,736	724

The expenditures for diphtheria antitoxin, as compared with 1916 is as follows:

1916		1917	
January	\$328 65	January	\$369 45
February	490 10	February	258 90
March	330 15	March	316 95
April	253 15	April	289 45
May	178 85	May	286 35
June	232 65	June	404 60
July	228 80	July	148 30
August	711 20	August	601 15
September	1,618 35	September	735 35
October	1,402 15	October	951 75
November	545 50	November (976.70×41.00)	1,017 70
December	860 05	December	498 05
	\$7,079 60		\$5,878 00

Shipments of diphtheria antitoxin to distributors, by National Vaccine and Antitoxin Institute, from May 23 to June 30, 1917. \$375 70

The contract with the National Vaccine & Antitoxin Institute was terminated on June 30th and awarded to the E. R. Squibbs & Sons Company, of New York, at a much lower rate than we were previously paying. We have saved the State about \$2,000.00 by this new contract.

DIPHTHERIA ANTITOXIN DISTRIBUTORS

ABBEVILLE COUNTY.

Abbeville.....McMurray Drug Co.
 Donalds.....Donalds Drug Co.
 Due West.....J. H. Bell & Son

AIKEN COUNTY.

Aiken.....W. J. Platt & Co.
 Graniteville.....E. E. Platt, W. C. R. Turnbull
 Langley.....Smith Drug Co., J. F. Baker
 North Augusta.....T. G. Kirshaw
 Salley.....J. W. Sanders, People's Pharmacy
 Wagener.

ANDERSON COUNTY.

Anderson.....Owl Drug Co., Evans Pharmacy
 Belton.....Horton's Pharmacy
 Honea Path.....Bolt Drug Co.
 Iva.....Iva Drug Co., Watson Drug Co.
 Pelzer.....W. W. Griffin
 Pendleton.....E. G. Evans & Sons
 Townville.....S. A. Wideman
 Williamston.....Buford-Griffin Co.

BAMBERG COUNTY.

Bamberg.....Mack's Drug Store, H. W. Johnson
 Denmark.....Denmark Drug Co.
 Ehrhardt.....Copeland & Farrell, Ehrhardt Pharmacy
 Olar.....R. & H. Drug Store

BARNWELL COUNTY.

Allendale.....R. P. Searson Drug Co.
 Barnwell.....R. A. Deason & Co.
 Blackville.....Wessinger's Pharmacy
 Fairfax.....Fairfax Drug Store
 Williston.....J. M. Smith & Son

BEAUFORT COUNTY.

Beaufort.....C. G. Luther
 Port Royal.....M. B. Cope

BERKELEY COUNTY.

Monck's Corner.....Monck's Corner Drug Store

CALHOUN COUNTY.

St. Matthews.....Fair's Pharmacy
 Fort Motte.....Fort Motte Drug Co.

CHARLESTON COUNTY.

Charleston.....G. W. Aimar & Co., D. P. Frierson,
C. F. Schwettman & Son, W. H. Ziegler, L. G. Melfi
Mount Pleasant.....A. H. Patjens

CHEROKEE COUNTY.

Blacksburg.....Carolina Drug Co.
Gaffney.....Gaffney Drug Co.

CHESTER COUNTY.

Chester.....Chester Drug Co.

CHESTERFIELD COUNTY.

Cheraw.....T. E. Wannamaker & Sons
Chesterfield.....D. H. Laney
Jefferson.....People's Drug Co.
McBee.....McBee Drug Co.
Pageland.....Pageland Drug Co.

CLARENDON COUNTY.

Jordan.....L. W. Nettles, M. D.
Manning.....Dickson's Drug Store
Popeville.....Thomas W. Gunter
Summerton.....Summerton Drug Co., D. O. Rhame, Leon Fisher
Turbeville.....C. E. Gamble
New Zion.....E. B. Gamble, M. D.

COLLETON COUNTY.

Walterboro.....Walterboro Drug Co.

DARLINGTON COUNTY.

Darlington.....People's Drug Co.
Hartsville.....Robert Stewart, Jr.
Lamar.....Palmetto Drug Co.

DILLON COUNTY.

Dillon.....Evans Pharmacy, McLaurin Drug Co.
Latta.....E. A. Bethea
Page's Mill.....Smith's Pharmacy

DORCHESTER COUNTY.

St. George.....P. M. Judy
Summerville.....Tupper Pharmacy Co.

EDGEFIELD COUNTY.

Edgefield.....Penn & Holstein
Johnston.....People's Drug Co.

FAIRFIELD COUNTY.

Blythewood.....M. Langford
 Ridgeway.....B. G. Team, M. D.
 Winnsboro.....J. H. McMaster & Co.

FLORENCE COUNTY.

Florence.....F. U. Lake Drug Co.
 Lake City.....Lake City Drug Co.
 Scranton.....W. S. Lynch
 Timmons ville.....Marvin Drug Co., Cole Drug Co.

GEORGETOWN COUNTY.

Georgetown.....Iselman Drug Co.

GREENVILLE COUNTY.

Fountain Inn.....Redick's Pharmacy
 Greenville.....Carpenter Bros., L. H. Stringer
 Greer.....Corner Drug Co.
 Piedmont.....Suber Drug Co.
 Simpsonville.....Simpsonville Drug Co.

GREENWOOD COUNTY.

Greenwood.....Crawford Drug Co., Greenwood Drug Co.
 Ninety-Six.....Barr Drug Co.
 Ware Shoals.....Ware Shoals Mfg. Co. (Drug Dept.)
 Troy.....Troy Drug Store

HAMPTON COUNTY.

Estill.....Estill Pharmacy
 Hampton.....Charles A. Rush

HORRY COUNTY.

Conway.....Conway Drug Co.

JASPER COUNTY.

Ridgeland.....Louis McCaw

KERSHAW COUNTY.

Bethune.....Bethune Drug Co., H. H. Holder
 Camden.....W. R. Zemp

LANCASTER COUNTY.

Heath Springs.....W. T. Stover & Sons, People's Drug and Grocery Co.
 Kershaw.....Hayes & Gregory
 Lancaster.....Standard Drug Co.

LAURENS COUNTY.

Clinton.....City Pharmacy, Clinton Pharmacy
 Laurens.....Powe Drug Co.

LEE COUNTY.

Bishopville.....Parker Drug Co.

LEXINGTON COUNTY.

Batesburg.....Ridgell Drug Co.

Chapin.....J. W. Eargle

Leesville.....Citizens' Drug Co.

Lexington.....Harmon Drug Co.

Pelion.....D. R. Kneece

Swansea.....J. R. Lanford

MARION COUNTY.

Marion.....J. S. Davis

Mullins.....Palace Drug Co., Kirby's Pharmacy

Nichols.....Moody's Drug Store

MARLBORO COUNTY.

Bennettsville.....Douglas & Breeden

Blenheim.....Napier's Drug Store

Clio.....McLeod's Pharmacy

McColl.....Moore Drug Co.

NEWBERRY COUNTY.

Little Mountain.....J. M. Sease

Newberry.....Gilder & Weeks, W. G. Mayes Drug Store

Prosperity.....Prosperity Drug Co.

Oconee County.

Clemson College.....L. C. Martin

Fairplay.....W. C. Mays

Seneca.....Seneca Pharmacy

Walhalla.....Dr. H. M. Barton

Westminster.....H. B. Zimmerman & Co.

ORANGEBURG COUNTY.

Branchville.....W. F. McKewn

Elloree.....P. L. Felder

Eutawville.....E. O. Horger

North.....People's Drug Store, Davis Drug Co.

Orangeburg.....J. G. Wannamaker Mfg. Co.

Springfield.....Springfield Drug Co.

PICKENS COUNTY.

Central.....Central Drug Co.

Easley.....Palmetto Pharmacy

Liberty.....Hunter's Pharmacy

Pickens.....Pickens Drug Co.

RICHLAND COUNTY.

Columbia.....Blanding Street Drug Store, McGregor's Drug Store,
Taylor Drug Co., Wingfield's Pharmacy

New Brookland.....Burnett & Whetsell

SALUDA COUNTY.

Ridge Spring.....	Ridge Drug Co.
Saluda.....	Saluda Drug Co.

SPARTANBURG COUNTY.

Campobello.....	Campobello Drug Co.
Converse.....	People's Drug Store
Cowpens.....	Cowpens Drug Co.
Inman.....	Inman Drug Co.
Landrum.....	W. M. Lambright, Landrum Drug Co.
Pacolet.....	Pacolet Mfg. Co.
Spartanburg.....	Green's Drug Store, Arthur Irwin, Ligon's Drug Store, K.-W.-N. Pharmacy, Todd Drug Co.
Woodruff.....	O. E. Westmoreland

SUMTER COUNTY.

Mayesville.....	King & Gardner, Bradley & Thomas
Sumter.....	Sibert's Drug Store

UNION COUNTY.

Jonesville.....	Jonesville Drug Co.
Union.....	People's Drug Store, Glymph's Pharmacy

WILLIAMSBURG COUNTY.

Greelyville.....	Rogers Drug Store, Zeigler's Drug Co.
Johnsonville.....	Cockfield Drug Co.
Kingstree.....	Gamble & Jacobs, Kingstree Drug Co.

YORK COUNTY.

Clover.....	Clover Drug Co.
Fort Mill.....	Ardrey Drug Store, Parks' Drug Co.
Rock Hill.....	Rock Hill Drug Co.
Sharon.....	Sims Drug Co.
Yorkville.....	York Drug Co.

Typhoid Fever.

We are able again to report progress in our efforts to reduce the number of cases of typhoid fever in this State, with a reduction this year over last year of 396 deaths up to November 1st as compared with 413 in 1916. Allowing 10 cases to each death, this gives us a reduction of 170 cases; 544 cases are reported to us as occurring throughout the State. This is again much less than the actual number of cases, for multiplying the number of deaths, 396 by 10, we have the probable number of cases which occurred in the State, which is 3,960 as compared with a probable 4,130 last year. This gives us a case rate of 29.2 per hundred thousand, which is still much too high, as the rate for the entire

United States is about 15 per hundred thousand. The work done in this State this year has not yet had an opportunity to reduce the typhoid rate for the improvement in rural sanitation, the proper sanitation of mill villages and the smaller towns will show next year. The census of South Carolina should determine the number of rural homes which have been sanitated; the mill villages, towns and cities would show a startling number of sanitary closets built, and improved sewerage in cities and mill villages. The work done by the State Board of Health in conjunction with the International Health Board in Orangeburg and Greenwood Counties, and portions of Richland County, will be discussed by Dr. L. A. Riser, the director of this work. We believe that the work done this year has been the best that has yet been done in this State, but to educate the entire population in the simple rules which prevent the occurrence of typhoid fever is still the task of the State Board of Health, and by preaching and teaching the doctrine that a person can not contract typhoid fever except from the excretions of persons who have the disease, or who have had the disease and are not yet cured of it, i. e., the carriers, seems a simple proposition, but people persist in blaming their typhoid on hogpens, and other nuisances, which are nuisances under the common law, but are not nuisances dangerous to public health.

It would be unfair to tabulate the reported cases of typhoid fever by counties as some counties report and others do not. It is sufficient to say that there must have been, as stated above, 3,960 cases at least, whereas our reports from physicians and health officers in the State only show 544. The only way in which the health of the counties can be improved is by having health organizations similar to those in our cities. We must have whole-time county health officers, with at least three inspectors, a laboratory sufficiently well equipped to make ordinary diagnostic tests, also tests for impure water and milk, a nurse trained in rural health work, and a central office from which the work can be supervised in each county. This is the plan for rural health work that our demonstration work in the counties is leading up to. When we get these agencies in every county in the State, we may be certain that we will save a sufficient number of lives to repay the county taxpayers ten times their money. When we can get the taxpayers to see this as we see it, our work in this State for the betterment of public health will be accomplished.

One of the best methods used in the suppression of this disease is the inoculation with typhoid bacterin, and we are continuing this work in the State, the Laboratory supplying a portion of the bacterin sent out, and E. R. Squibb & Sons the balance. We have sent out approximately 30,000 ampules; in other words, inoculated about 10,000.

Rules for Preventing Typhoid Fever.

For the Individual:

1. Keep away from all known or suspected cases of typhoid.
2. Wash hands thoroughly before meals. Do not use "roller towels."
3. Use drinking water only from sources known to be pure, or, if this is not possible, use water that has been purified by municipal filtration or by hypochlorite treatment or by boiling in the household.
4. Avoid bathing in polluted water.
5. Use pasteurized or boiled, instead of raw milk.
6. Select and clean vegetables or berries, that are to be eaten raw, with greatest care.
7. Avoid eating "fat" raw oysters, and, in general, oysters and other shell-fish whose origin is not known.
8. Be vaccinated against typhoid in all cases in which any special exposure is known or feared.

For the Community:

1. Insist on the hearty co-operation of all persons with an efficient health officer.
2. Require notification and a reasonable degree of isolation of every known or suspected typhoid case.
3. Exercise strict control over the disinfection of known typhoid excreta.
4. Insist on pure or purified water supplies.
5. Require pasteurization of milk supplies.
6. Regard all human excreta as possibly dangerous, and control their disposition in such a way to prevent contamination of food and drink.

Tuberculosis.

Our organized efforts against tuberculosis are beginning to bear fruit in this State. The figures show that we have reduced the number of deaths from this disease by one-third in two years,

and when we think of the untold misery that has been saved as graphically shown by these figures, we are well repaid for the effort we have made. During 1918 we feel sure that still more earnest effort will be made to reduce the number of deaths from tuberculosis.

We are extremely proud of our South Carolina State Sanatorium, which will be able to take care of 56 cases this year, as compared with 32 in 1917. The report of the Field Secretary, Mrs. Annie I. Rembert, will convince the most skeptical that this money has been well expended. We know that if the Legislature will visit the Sanatorium that they will feel that this State should spend all that it can afford in adding to the number of beds to be maintained at this camp.

The following table shows the number of deaths from tuberculosis occurring this year, up to the first of November, 1917:

DEATHS FROM TUBERCULOSIS, ALL FORMS, IN THE FOLLOWING
COUNTIES FOR TEN MONTHS TO NOVEMBER 1, 1917.

Counties	Population	Number
Abbeville	35,687	29
Alken	43,619	26
Anderson	78,268	73
Bamberg	19,329	9
Barnwell	34,209	13
Beaufort	30,355	21
Berkeley	23,487	11
Calhoun (included in Lexington).....		14
Charleston	88,262	116
Cherokee	29,210	34
Chester	29,235	32
Chesterfield	30,009	18
Clarendon	34,704	20
Colleton	36,608	2
Darlington	138,598	45
Dillon (included Marion)		33
Dorchester	18,896	13
Edgefield	30,043	9
Fairfield	29,452	9
Florence	40,126	41
Georgetown	23,270	23
Greenville	77,736	81
Greenwood	37,923	29
Hampton	25,997	15
Horry	29,278	18
Jasper (included in Beaufort and Hampton).....		3
Kershaw (included in Darlington)		17
Lancaster	28,121	35
Laurens	44,171	56
Lee (included in Darlington)		20
Lexington	115,656	19
Marion	48,259	30
Marlboro	36,020	26
Newberry	37,355	30
Oconee	29,666	27
Orangeburg (included in Lexington)		53
Pickens	29,223	15
Richland	61,148	88
Saluda	22,180	8
Spartanburg	94,722	118
Sumter (included in Darlington).....		56
Union	32,683	37
Williamsburg	41,361	57
York	51,512	68
McCormick		3
	1,625,475	1,480

Deaths for 1916, 1,492. Deaths for 1917, 1,480. Rate for 1916 per 100,000,
111.4. Rate for 1917, 109.2.

Measles.

As we have previously stated in this report, measles has been the only big epidemic that this State has had to deal with this year. There have been 146 deaths reported from measles, and 388 from broncho-pneumonia, making a total of 534, which makes it rank about 6th in the causes of death. Experience in the army on the border shows that an epidemic of measles properly managed could be reduced by the following methods:

(A) The Infected Individual and His Environment:

1. Recognition of the disease—clinical symptoms. Special attention to the rise of temperature. Koplik spots and catarrhal symptoms in exposed individuals.
2. Isolation—during period of communicability.
3. Immunization—none.
4. Quarantine—exclusion of exposed susceptible school children and teachers from school until 14 days from last exposure. This applies to exposure in the household. Exclusion of exposed susceptible children from all public gatherings for the same period.
5. Concurrent disinfection—thorough cleansing.

(B) General Measures:

1. Daily examination of exposed children and of other possibly exposed persons. This examination should include record of the body temperature. A non-immune exposed individual exhibiting a rise of temperature of 0.5°C . or more should be promptly isolated pending diagnosis.
2. Schools should not be closed or classes discontinued where daily observation of the children by a doctor or nurse is available.
3. Education as to special danger of exposing young children to those exhibiting acute catarrhal symptoms of any kind.

We intend to try to put these methods into operation during the coming year.

Whooping Cough.

Figures show a reduction in the number of deaths directly attributable to this disease from 120 to 76. This disease being due to the bacillus pertussis is spread by the discharges from the laryngeal and bronchial mucus membranes of infected persons and sometimes infected dogs and cats. It is transmitted by contact

with an infected person or animal or with articles freshly soiled with the discharges of such person or animal. The reason why we have been able to do little to prevent this disease is because by the time it is diagnosed by the whoop, the infection period has persisted for some time. It is very dangerous to children under 2 years of age, and it is, therefore, the duty of every physician to see that persons having babies are warned in regard to the extreme danger of contracting the disease, and children who have the disease should be separated from susceptible children and excluded from schools and public places for at least three weeks.

Concurrent disinfection of the discharges of the nose and throat of the patient and articles soiled with such discharges. Terminal disinfection—cleansing of the premises used by the patient, and educational and personal cleanliness and avoidance of those suffering with colds and coughs who do not use handkerchiefs, and cough with utter disregard of the feelings of others.

Anterior Poliomyelitis (Infantile Paralysis).

We are glad to report that there has been no epidemic of this disease this year, but there seems to be sufficient foci of infection developing in various parts of the State, and we are going to be on the alert and prevent its spread if possible. The State Board of Health has adopted the following rules and regulations for the prevention of the disease. These rules and regulations were submitted by a committee appointed from the conference held in Washington in regard to this disease.

Rules and Regulations for the Control of Poliomyelitis.

Isolation:

Isolation is a useful measure for limiting the spread of this disease. It is often, however, without demonstrable effect because of the general prevalence of unrecognized cases and carriers.

On account of (a) the numerous instances where diagnosis is not made until late, so as the patient is not isolated for several weeks after the date of onset and yet no apparent secondary cases appear.

(b) The fact that the longest period observed where a primary case was apparently the source of infection is only ten days.

(c) Epidemiological experience does not justify a long period of isolation.

(d) The satisfactory experience in at least one city and one State with the use of a two weeks' period of isolation for all known cases of poliomyelitis over a period of years.

Your committee recommends:

First: That an isolation period for a patient of not less than two weeks nor more than three weeks from onset be required unless the temperature has not returned to normal in the meantime.

Second: That children of the same household in contact with a patient be restricted from places of public assembly for a period of fourteen days from last date of contact, as determined by the health officer.

Third: That an adult of the household, if the patient is properly isolated, may continue his vocation, provided it does not bring him into contact with children at any time.

Disinfection:

Your committee recommends that: first, the discharges from the nose, throat and bowels of the patient be disinfected promptly; second, the caretaker shall wash her hands with soap and hot water promptly after handling said discharges; third, the caretaker shall wash her hands similarly before leaving the room occupied by the patient; fourth, isolation shall be terminated by a thorough washing of entire body and hair of the patient; and the room cleaned with soap and hot water, aired and sunned; fifth, sick room precautions should include the usual attention to cleaning and disinfection of eating utensils, personal and bed clothing, rugs, door knobs and other things handled by the patient or caretaker.

Precautions for Physicians and Nurses:

The committee recommends that unless a special covering and gloves be worn (a) the physician and nurse shall so handle the patient that discharges shall not soil their clothing and special care being taken to prevent droplet infection.

(b) The physicians shall thoroughly wash their hands before leaving the premises.

Hospitalization:

The committee approves the removal to hospitals of patients affected with poliomyelitis when proper isolation and satisfactory care for the patient can not be secured in the home; but the committee believes that during the early stage of the disease the patient rest in bed and transfer to a hospital may be detrimental to his welfare.

Other Suggested Measures Designed to Control the Disease:

(a) The committee does not recommend the use of travel certificates, but travel and contact with the children should be discouraged.

(b) Surveillance for persons coming from infected districts, in the opinion of your committee is not necessary, unless the person has been definitely exposed to infection.

(c) The most effective agency in the control of this disease is the employment of public health nurses who, in co-operation with the physician, will teach sick room precautions, the necessity for rest in bed, and the need of proper support for the affected parts.

(d) Expert diagnosticians should be provided and the use of lumbar puncture urged.

(e) Food, especially such as is consumed uncooked, should be considered as a possible means of transferring the infectious agent and appropriate measures should be instituted to protect the public during an outbreak.

(f) Where poliomyelitis occurs in a school, your committee advises that the school be not closed, but that daily medical supervision be instituted.

(g) Efficient screening and the use of approved insecticides should be employed so that the insects shall not have access to the patient or his excretions.

(h) Household pets should be excluded from the sick room.

(i) In the presence of poliomyelitis a search for, and a careful examination of, all ill children should be made. All children having fever should be isolated pending the diagnosis.

(j) Prompt reporting of all recognized or suspected cases, personally or by telegraph, or by telephone, is essential, in addition to the written report required by law.

(k) Weekly reports by State and territorial health authorities should be made to the United States Public Health Service.

Respectfully submitted,

JAMES A. HAYNE, M. D.,

Secretary State Board of Health and State Health Officer.

Epidemic Cerebro-Spinal Meningitis.

In view of the epidemics of this disease which prevail at the training camps for soldiers in this State, we are apprehensive that it may become a serious menace to our State during the coming year. We respectfully submit that a large appropriation should be made to meet the probable demands upon the State Board of Health for the curative serums and for laboratory facilities for taking charge should an epidemic occur. It is necessary in this disease that diagnosis be made microscopically at once, and your State Health Officer expects to be called upon to make these diagnosis many times during the coming year. Owing to the fact that the spinal fluid is bacteriolytic to the diplococcus intra cellularis meningitidis fluid and can not be transported easily, and diagnosis must be made at the bedside or some near by laboratory. Hence for isolated communities the State Health Officer wishes to equip a compact traveling laboratory for making these diagnosis, and have it in operation. A prompt administration of a serum saves at least one-half of the patients, whereas without this, 80 to 90 per cent. die. We have furnished meningitis serum required by law to the following physicians during the year. Thirty-three deaths have occurred during 1917 as compared with twenty last year. Not all of these, however, proved to be of epidemic form, and some of them were probably due to pneumococcus or to tuberculus baccillus:

Jan.	10.	Dr. J. C. Harper, Greenwood, S. C.....	3 Pkgs.
Jan.	28.	Dr. G. P. Neel, Greenwood, S. C.....	1 Pkg.
March	6.	Dr. Baxter Haynes, Spartanburg.....	3 Pkgs.
April	10.	Dr. R. R. Berry, Union.....	1 Pkg.
June	6.	Dr. Wm. Weston, Columbia.....	2 Pkgs.
July	26.	Dr. R. R. Berry, Union.....	2 Pkgs.
August	25.	D. S. Pope, Columbia.....	4 Pkgs.

Dec.	20.	Dr. A. D. Gregg, Society Hill, S. C.....	1 Pkg.
Dec.	20.	Dr. D. Morehead, Columbia, S. C.....	3 Pkgs.
Dec.	22, 24, 26.	Dr. S. B. Fishburne, Columbia, S. C.	6 Pkgs.
Dec.	29.	Dr. Wm. Egleston, Hartsville, S. C.....	4 Pkgs.
Total			30 Pkgs.

Malaria.

There was an increase in the number of deaths attributable directly to this disease in 1917. In 1916 there being 233, and 259 in 1917, from January 1st to October 31st. Nothing would repay the taxpayers of the counties of the State where malaria prevents them from receiving the value of their lands, and by its insidious action causes such a loss of effectiveness, as a proper appropriation for the drainage of their lands, and the adopting of such measures as are suitable in each case. We know how to prevent malaria, and all that is necessary is the combined effort of a community to get rid of malaria, and they will accomplish what they set out to do. Good work has been done near Columbia, and this work will continue during the coming year, and should be an object lesson to any one who wishes to learn how to prevent his community from having malaria.

We again urge that the Primer on Malaria, Its Causes and Prevention, by Dr. Carter, Assistant Surgeon General, U. S. Public Health Service, should be adopted as a textbook in our schools, and that no child be permitted to graduate unless they pass an examination on this book, and is able on a practical test to distinguish the malaria mosquito from the house mosquito or culex. This book has been taught in many of our schools, and some of the essays submitted by children in the 5th grade show more knowledge of the cause and prevention of malaria than many adults of good education possess.

Pellagra.

Pellagra is still a menace to our population, and with the growing scarcity of food, and the patriotic efforts to cut down on meat and wheat, we are afraid that possibly there may be an increase this year, if the theory of the United States Public Health Service as to the cause of this disease is correct. Our physicians are learning to cure this disease by proper administration of food

and rest, and treatment similar to that administered to those suffering from tuberculosis. The following table shows the number of deaths from pellagra occurring this year.

*Deaths from Pellagra in the Following Counties for Ten Months,
Ending October 31, 1917.*

Counties	Population	Number
Abbeville	35,687	6
Aiken	43,619	11
Anderson	78,268	32
Bamberg	19,327	..
Barnwell	34,209	6
Beaufort	30,355	3
Berkeley	23,487	5
Calhoun (included in Lexington) .....	..	3
Charleston	88,968	87
Cherokee	29,210	7
Chester	29,933	17
Chesterfield	30,009	2
Clarendon	34,704	6
Colleton	36,608	2
Darlington	138,598	14
Dillon (included in Marion) .....	..	5
Dorchester	18,896	3
Edgefield	30,043	8
Fairfield	29,452	5
Florence	40,196	19
Georgetown	22,270	7
Greenville	77,736	24
Greenwood	37,923	18
Hampton	25,997	6
Horry	29,278	2
Jasper (included in Beaufort and Hampton) .....	..	..
Kershaw (included in Darlington) .....	..	5
Lancaster	28,121	16
Laurens	44,171	12
Lee (included in Darlington) .....	..	3
Lexington	115,656	2
Marion	48,259	9
Marlboro	33,420	9
Newberry	37,355	17
Oconee	29,666	7
Orangeburg (included in Lexington) .....	..	18
Pickens	29,223	9
Richland	61,148	46
Saluda	22,186	2
Spartanburg	94,722	43
Sumter (included in Darlington) .....	..	15
Union	32,683	6
Williamsburg	41,361	8
York	51,512	15
McCormick .....	..	8
	1,625,473	544

Deaths for 1916, 553. Deaths for 1917, 544. Rate for 1916 per 100,000, 41.2. Rate for 1917, 40.2.

MINUTES OF EXECUTIVE COMMITTEE MEETINGS.

Columbia, S. C., February 28, 1917.

A special meeting of the Executive Committee of the State Board of Health was held Wednesday, February 28, at 9:30 A. M., at the offices of the Secretary, Palmetto Bank Building, with the following members present: Drs. Robt. Wilson, Jr. (Chair-

man), D. B. Frontis, C. C. Gambrell, W. J. Burdell, Wm. Eggleston, W. M. Lester, W. W. Dodson and James A. Hayne, Secretary and State Health Officer.

The minutes of the last meeting were read and approved.

This meeting was held for the purpose of mapping out the work of the Executive Committee of the State Board of Health for the present year.

The first business before the Executive Committee was the selection of an architect to build the additions to the Sanatorium at State Park, authorized by the General Assembly. Messrs. Wilson & Sompayrac were chosen as architects, and plans were submitted. It was moved and seconded that Dr. Ernest Cooper, Superintendent of the South Carolina Sanatorium, and Mr. E. S. Sompayrac, the architect, visit the Tuberculosis Sanatoriums in Maryland, Virginia and North Carolina in order to obtain data for the construction of the new buildings authorized.

Mrs. Annie I. Rembert appeared before the Executive Committee and made a report of what she had accomplished in securing aid from the counties, cities and villages, and mill owners for free beds at the South Carolina Sanatorium. Dr. D. B. Frontis moved that Mrs. Rembert be elected Field Secretary for the South Carolina Sanatorium at a salary of one thousand dollars per annum and the necessary traveling expenses; said salary and traveling expenses to be paid out of the maintenance fund for the Sanatorium. The Executive Committee expressed its thanks to Mrs. Rembert for the efficient work done by her during the preceding year.

The next matter that was brought to the attention of the Executive Committee was a letter from W. A. Stevenson, County Supervisor of Abbeville County, in regard to a letter from W. D. Morrah of Troy, S. C., in regard to Rebecca Tate, a leper. It was moved by Dr. Gambrell that the State Health Officer be directed to go to McCormick and make such disposition of Rebecca Tate as should be agreed upon between him and the county officials.

It was moved by Dr. Eggleston that the Executive Committee visit Broxton Township in a body on March 8, and that the Secretary make arrangements for this trip. This visit was for the purpose of inspecting that region and determining whether anything could be done to relieve the malarial situation.

It was moved, and seconded, by Dr. Egleston, that Dr. Riser's suggestions as to his work and salary be approved and adopted, and that his salary be raised to twenty-five hundred dollars per annum, effective April 1, one-half to be paid by the State Board of Health from the fund for Intensive County Health Work and the other half by the International Health Board, and that his necessary traveling expenses, not to exceed one thousand dollars, shall be paid monthly upon presentation of an itemized statement of traveling expenses for the preceding month; one-half of which to be paid by the State Board of Health from the fund for Intensive County Health Work and the other half by the International Health Board.

Dr. F. A. Coward, Director of the State Board of Health Laboratory, appeared before the Executive Committee and made a brief report of the needs for the Laboratory. Dr. Gambrell moved that a physician be appointed as assistant in the laboratory, at a salary of one hundred dollars per month.

After some discussion in regard to the keeping of diphtheria antitoxin in showcases and other places where it would be exposed to light and heat, Dr. Gambrell moved that the Secretary write to the National Vaccine & Antitoxin Institute of Washington, D. C., manufacturers of this antitoxin, and who are now furnishing this antitoxin to distributors for free distribution to physicians throughout this State, and request that this antitoxin be kept in a cool place by their distributors.

There being no further business the Executive Committee adjourned.

JAMES A. HAYNE, M. D.,
Secretary.

Attested.

Spartanburg, S. C., April 16, 1917.

The annual meeting of the Executive Committee of the State Board of Health was held Monday, April 16, at 8 P. M., at Spartanburg Medical Club Room, Chapman Building, Spartanburg, with the following members present: Drs. Robert Wilson, Jr. (Chairman), D. B. Frontis, C. C. Gambrell, E. A. Hines, W. J. Burdell, Wm. Egleston, W. M. Lester, W. W. Dodson and Jas A. Hayne, Secretary and State Health Officer.

The first business of the Committee was the letting of the contract for the free distribution of diphtheria antitoxin, typhoid bacterin, and smallpox vaccine virus. Bids were submitted upon the following specifications:

Specification for Proposals on Diphtheria Antitoxin.

1. Sealed proposals for supplying a concentrated and refined diphtheria antitoxin (Gibson method or a satisfactory modification thereof) will be received by the Executive Committee of the South Carolina State Board of Health, on or before April 13, 1917; bids to be opened in Spartanburg on April 16, 1917, at the annual meeting of the Executive Committee of the State Board of Health to be held on that date.

2. Proposals must be typewritten, signed by a duly authorized representative of the firm making the proposal, and accompanied by a bond of \$1,000.00 to secure the faithful fulfillment of the contract in case it should be awarded.

5. Antitoxin is to be furnished in sterile syringes and in doses of 1,000, 3,000, 5,000, 10,000 units. Sample packages covering these doses, in syringes to be supplied, must be submitted with bid.

4. Each syringe shall be furnished in a separate wooden box, carefully packed so as to prevent breakage, in a manner acceptable to this Board.

5. Each package shall be wrapped in a special wrapper, bearing the name of the South Carolina State Board of Health, the directions for use; also the name and address of the manufacturer. The printing on wrapper must meet with the approval of this Board; in fact, not only the wrapper, but the entire package must meet with the approval of this Board, and must also meet in every way the requirements of the United States Public Health and Marine Hospital Service, as exercised by them over general interstate business in antitoxin.

6. The contractor will be required to place and keep in stock at all times, in all towns of 500 (of which there are probably about 100) or over, and at all such other places as the Board may direct, such quantities of diphtheria antitoxin as may be deemed necessary.

7. The contractor will also exchange for fresh such antitoxin as may have lost its indicated strength. The contractor will also be required to furnish such blanks and printed matter as

may be desired by the Board in distributing the antitoxin, and it will be his duty to see to it that fresh antitoxin is at all times kept in the hands of the distributor, and that it is properly distributed by him.

8. The contractor shall pay the distributors a compensation of at least 10 per cent. for their services, and this compensation to be paid them every thirty days, in accordance with the number of requisitions returned to them.

9. The contractor will be required to keep an accurate record of the stock sent to each distributing station, and that such stock be exchanged, free of charge when it becomes outdated, without notification from the distributor, and further, that expenses for transportation charges be sent to the distributor for the return of old stock.

10. The contractor shall maintain a record of all this stock at Columbia, such record to be open to inspection by your office.

11. The contractor shall furnish the Secretary of the State Board of Health, at his request, a statement of the exact amount of stock any distributing station has on hand, which can be told by the stock shipped them less the requisitions returned.

12. The contractor will be required to supply the distributing stations with requisition blanks, in triplicate, bound in book form.

13. The contractor will be required to recall his stock from the distributing stations at the termination of the contract, provided he is not the next successful bidder.

14. That each distributing station carry a stock of not less than 6 packages of 1,000 units, 6 packages of 3,000 units, 6 packages of 5,000 units, 6 packages of 10,000 units.

15. The contractor will be required to guarantee a potency of not less than 500 units per co. for a 1,000 unit package, 900 units per co. for a 3,000 unit package, 1,600 units per co. for a 5,000 unit package. units per co. for a 10,000 unit package.

16. The Board will pay at the end of each month for all antitoxin used during the preceding month.

17. The Board will consider proposals of any character, regardless of the suggestions contained therein.

18. The Board reserves the right to reject any or all proposals, or to accept the highest or lowest bid, as it elects.

19. Proposals should be enclosed in an envelope marked "Proposals for Diphtheria Antitoxin," and be sent by special delivery

mail to the Secretary of the State Board of Health, James A. Hayne, M. D., Columbia, S. C., before April 13, 1917.

Specifications for Proposals on Typhoid Bacterin.

1. We wish you to submit a plan by which typhoid bacterin may be issued at the least cost; say fifty thousand ampules, more or less, and shipments to be made to this office upon receipt of orders.

2. The Board reserves the right to reject any or all proposals, or to accept the highest or lowest bid as it deems best.

3. Proposals should be enclosed in an envelope marked "Proposals for Typhoid Bacterin," and be sent by special delivery mail to the Secretary of the State Board of Health, James A. Hayne, M. D., Columbia, S. C., before April 13, 1917.

Specifications for Proposals on Smallpox Vaccine Virus.

1. We wish you to bid as to the price per point.

2. We wish you to submit a plan by which the vaccine may be distributed at the least cost, and by which we may be able to have returned to us as many of the unused points as possible.

3. That these points shall be delivered at this office in such quantities as we order, to be sent out from this office.

4. That if the contract is awarded to your firm, that your firm will be the only firm from which the State Board of Health will purchase vaccine virus.

5. That the payment for points purchased shall be made quarterly, and that credit shall be given for points returned at price originally purchased.

6. That the State Board of Health reserves the right to accept the lowest or the highest, or to reject any and all bids.

7. That the firm to whom the contract is awarded shall deposit a bond of one thousand dollars with the Secretary of the State Board of Health, for faithful performance of said contract.

8. That all bids shall be sent to the Secretary of the State Board of Health on or before April 13, 1917; said bids to be opened in Spartanburg on April 16, 1917, at the meeting of the Executive Committee of the State Board of Health to be held on that date.

9. Proposals should be enclosed in an envelope marked "Proposals for Vaccine Virus," and be sent by special delivery mail to the Secretary of the State Board of Health, James A. Hayne, M. D., Columbia, S. C., before April 13, 1917.

Representatives of the following companies were present and appeared before the Executive Committee and set forth the merits of their respective products:

E. R. Squibb & Sons, New York, N. Y.

National Vaccine & Antitoxin Institute, Washington, D. C.

Lederle Antitoxin Laboratories, New York, N. Y.

The Gilliland Laboratories, Philadelphia, Pa.

H. K. Mulford Co., Philadelphia, Pa.

After a careful consideration of all the bids, the contracts were awarded to E. R. Squibb & Sons for the ensuing year. This firm will, therefore, be the official and sole distributors for the State Board of Health for diphtheria antitoxin, typhoid bacterin, and smallpox vaccine virus, under the following contracts:

CONTRACT WITH E. R. SQUIBB & SONS, NEW YORK,
N. Y., FOR FURNISHING DIPHTHERIA ANTI-
TOXIN FOR DISTRIBUTION THROUGHOUT
THE STATE OF SOUTH CAROLINA UNDER
THE DIRECTION OF THE STATE
BOARD OF HEALTH.

Article of Agreement, Entered into this day between the South Carolina State Board of Health hereinafter known as party of the first part and E. R. Squibb & Sons of New York, N. Y., hereinafter known as party of the second part.

Witnesseth: 1. The party of the first part agrees that the party of the second part shall have the exclusive right to supply all diphtheria antitoxin used by the South Carolina State Board of Health for a period of one year from date hereof.

2. The party of the first part agrees to pay the following prices for the various units syringe packages of diphtheria antitoxin:

1,000 Units.....	\$.35
3,000 Units.....	.95
5,000 Units.....	1.50
10,000 Units.....	2.50

Used by them or under their direction and to remit for same every ninety days. In addition, the party of the second part will pay the distributor a commission of 10 per cent. on all diphtheria antitoxin distributed under direction of the South Carolina State Board of Health.

3. In consideration of the exclusive right to supply diphtheria antitoxin, the party of the second part agrees to furnish diphtheria antitoxin in any size packages as shall be designated, at such times and in such amounts as the party of the first part may direct, at the prices quoted in paragraph No. 2.

4. The party of the second part further agrees to exchange without charge, other than the charge of transportation, any or all packages upon which the potency date has expired for a fresh product.

5. The party of the second part further agrees to install a system at its own expense for the distribution of the said antitoxin throughout the State and to maintain a clerk at the salary of thirty dollars (\$30.00) per month, said clerk to be selected by the party of the first part, whose duty it shall be to take charge of the distribution of diphtheria antitoxin.

6. The party of the second part further agrees to any change or modification in the plan of distribution which the party of the first part may deem advisable or expedient.

7. The party of the second part further agrees to deposit with the Secretary of the South Carolina State Board of Health a surety bond on the amount of one thousand dollars (\$1,000.00) guaranteeing the above performance of this contract.

In Witness Whereof, We have set our hand and affixed our seal this 30th day of June, A. D., 1917, in duplicate.

EXECUTIVE COMMITTEE

South Carolina State Board of Health.

By JAMES A. HAYNE, M. D.,

Secretary State Board of Health.

E. R. Squibb & Sons,

By THOMAS F. MAHER, M. D.

CONTRACT WITH E. R. SQUIBB & SONS, NEW YORK, N. Y., FOR FURNISHING TYPHOID BACTERIN FOR DISTRIBUTION THROUGHOUT THE STATE OF SOUTH CAROLINA UNDER THE DIRECTION OF THE STATE BOARD OF HEALTH.

Article of Agreement, Entered into this day between the South Carolina State Board of Health hereinafter known as party of the first part and E. R. Squibb & Sons of New York, N. Y., hereinafter known as party of the second part.

Witnesseth: 1. The party of the first part agrees that the party of the second part shall have the exclusive right to supply all typhoid bacterin used by the South Carolina State Board of Health for a period of one year from date hereof.

2. The party of the first part agrees to pay at the rate of twenty-one cents (21) for three (3) ampule package, one dollar and fifty cents (\$1.50) for thirty (30) ampule package and four and three-quarter cents (4 3/4) per ampule when supplied on one hundred (100) ampule packages or at multiple thereof.

3. In consideration of the exclusive right to supply typhoid bacterin, the party of the second part agrees to furnish typhoid bacterin in style packages as shall be designated at such times and in such amounts as the party of the first part may direct, at the prices above quoted in paragraph No. 2.

4. The party of the second part further agrees to exchange without charge, other than the charge of transportation, any or all packages upon which the potency date has expired for fresh bacterin.

5. The party of the second part further agrees to install a system at its own expense for the distribution of said bacterin through the State and to maintain a clerk at a salary of ten dollars (\$10.00) per month, said clerk to be selected by the party of the first part, whose duties it shall be to take charge of the distribution of typhoid bacterin.

6. The party of the second part further agrees to any change or modification in the plan of distribution which party of the first part may deem advisable or expedient.

7. The party of the second part further agrees to deposit with the Secretary of the South Carolina State Board of Health a surety bond on the amount of one thousand dollars (\$1,000.00) guaranteeing the above performance of this contract.

In Witness Whereof, We have set our hand and affixed our seal this 30th day of June, A. D. 1917, in duplicate.

EXECUTIVE COMMITTEE,

South Carolina State Board of Health.

By JAMES A. HAYNE, M. D.,
Secretary State Board of Health.

E. R. Squibb & Sons,
By THOMAS F. MAHER, M. D.

CONTRACT WITH E. R. SQUIBB & SONS, NEW YORK,
N. Y., FOR FURNISHING SMALLPOX VACCINE
VIRUS FOR DISTRIBUTION THROUGHOUT
THE STATE OF SOUTH CAROLINA UNDER
THE DIRECTION OF THE STATE
BOARD OF HEALTH.

Article of Agreement, Entered into this day between the South Carolina State Board of Health hereinafter known as party of the first part and E. R. Squibb & Sons of New York, N. Y., hereinafter known as party of the second part.

Witnesseth: 1. The party of the first part agrees that the party of the second part shall have the exclusive right to supply all smallpox vaccine virus used by the South Carolina State Board of Health for a period of one year from date hereof.

2. The party of the first part agrees to pay four and one-quarter cents (4 1-4) per point or tube for smallpox vaccine virus used by them or under their direction and to remit for same every ninety days.

3. In consideration of the exclusive right to supply smallpox vaccine virus, the party of the second part agrees to furnish smallpox vaccine virus on sterile points or in capillary tubes, at such times and in such amounts as the party of the first part may direct, at a price of four and one-quarter (4 1-4) per point or per tube delivered.

4. The party of the second part further agrees to exchange without charge, other than the charge of transportation, any or all points or tubes upon which the potency date has expired for fresh vaccine virus.

5. The party of the second part further agrees to install a system at its own expense for the distribution of the said vaccine virus through the State and to maintain a clerk at a salary of fifty dollars (\$50.00) per month, said clerk to be selected by the party of the first part, whose duties it shall be to take charge of the distribution of smallpox vaccine virus.

6. The party of the second part further agrees to any change or modification in the plan of distribution which the party of the first part may deem advisable or expedient.

7. The party of the second part further agrees to deposit with the Secretary of the South Carolina State Board of Health a surety bond on the amount of one thousand dollars (\$1,000.00) guaranteeing the above performance of this contract.

In Witness Whereof, We have set our hand and affixed our seal this 30th day of June, A. D. 1917, in duplicate.

EXECUTIVE COMMITTEE,

South Carolina State Board of Health.

By JAMES A. HAYNE, M. D.,
Secretary State Board of Health.

E. R. Squibb & Sons,
By THOMAS F. MAHER, M. D.

A letter was read from the Surgeon General requesting action of the State Board of Health in regard to the federalization of State and Municipal Boards of Health. It was moved and seconded that this be referred to the House of Delegates of the South Carolina Medical Association.

The next business before the Executive Committee was the annual election of officers, and the following officers were elected: Drs. Robt. Wilson, Jr., Chairman, and James A. Hayne, Secretary and State Health Officer.

There being no further business the Executive Committee adjourned.

JAMES A. HAYNE, M. D.

Attested.

Secretary.

Greenville, S. C., May 9-10, 1917.

Pursuant to a resolution adopted by the Executive Committee of the State Board of Health, July 13, 1916, that the annual meeting of the South Carolina Association of Health Officers become stated and regular meetings of this Executive Committee, a meeting was held in Greenville on May 9-10 at 10 A. M., Otteray Hotel, with the following members present: Drs. E. A. Hines, W. J. Burdell, Wm. Egleston, W. W. Dodson and James A. Hayne, Secretary and State Health Officer.

After a session of two days with the South Carolina Association of Health Officers, the Executive Committee adjourned.

JAMES A. HAYNE, M. D.,

Attested.

Secretary.

Columbia, S. C., July 11, 1917.

The regular quarterly meeting of the Executive Committee of the State Board of Health was held Wednesday, July 11, at 1:15 P. M., at the offices of the Secretary, Palmetto Bank Building, with the following members present: Drs. Robt. Wilson, Jr. (Chairman), D. B. Frontis, C. C. Gambrell, E. A. Hines, W. J. Burdell, Wm. Egleston, W. M. Lester, W. W. Dodson and James A. Hayne, Secretary and State Health Officer.

The minutes of the last meeting were read and approved.

The first business before the Executive Committee was in regard to the safeguarding of the health of civilians residing near military camps or cantonments. The following resolution was introduced and passed:

Resolved: That the Executive Committee of the State Board of Health make a request that they take such steps as are necessary to safeguard the health of the camps in South Carolina, and the Executive Committee of the State Board of Health go on record as making such request.

Dr. Robert Wilson, Jr., presented a request from the Right Rev. Bishop Guerrey of South Carolina, presenting a sample of a chalice to be used instead of the individual communion cups. The following resolution was passed:

Resolved: That the Executive Committee of the State Board of Health will not endorse the design of the chalice submitted as sanitary, but are willing to admit that it is some small improvement upon the chalice as now used.

The next business before the Executive Committee was the reading of a letter from Dr. Grace L. Meigs in charge of hygiene, Children's Bureau, Washington, D. C. The Executive Committee appointed a committee consisting of Drs. Hayne and Hines, and the following resolution was introduced by Dr. Hines and passed by the Executive Committee:

Resolved: That each medical member of the Executive Committee of the State Board of Health appear before the medical organization in his district and such other organization as may seem advisable in the interest

of Infant and Child Welfare during the war. That the State Health Officer take the matter up with existing child welfare agencies, health departments of counties, towns and cities, and urge their co-operation with the State Health Department to the end that the health of the children of our State may be conserved.

The Secretary was also directed to write and offer the co-operation of the State Board of Health to the Children's Bureau of the U. S. Department of Labor in a campaign for Infant Welfare in South Carolina, and to write to Dr. Francis Bradley to that effect.

It was moved and seconded that an internship be established at the State Park Sanatorium, and that a definite plan for the establishment of such internship be worked out by the Chairman and Secretary of the Executive Committee of the State Board of Health and be presented at the next meeting.

It was moved by Dr. Burdell that E. P. Verner of the Parker Laboratory, in Charleston, act as chemist for the State Board of Health during the absence of Dr. F. L. Parker.

A letter was read from C. C. Hindman of Greenville, asking for permission to allow sewage from certain property owned by him in Greenville to flow into Richland Creek. Dr. Egleston moved that the request of Mr. Hindman be denied.

An opinion from the Attorney General was read in regard to the alleged nuisance created by the city of Chester, and the Secretary was ordered to take the matter up with Solicitor J. K. Henry, and to take such steps as the Solicitor advised.

There being no further business the Executive Committee adjourned.

JAMES A. HAYNE,
Secretary.

Attested.

Columbia, S. C., August 29, 1917.

A special meeting of the Executive Committee of the State Board of Health was held Wednesday, August 29, at 1:15 P. M., at the offices of the Secretary, Palmetto Bank Building, with the following members present: Drs. Robt. Wilson, Jr. (Chairman), D. B. Frontis, C. C. Gambrell, E. A. Hines, Wm. Egleston, W. M. Lester, W. W. Dodson and James A. Hayne, Secretary and State Health Officer.

The minutes of the last meeting were read and approved.

The purpose of this meeting was to confer with a representative of the U. S. Public Health Service with regard to sanitation of the environment of military camps in South Carolina.

It was moved and seconded that three members of the Executive Committee of the State Board of Health shall constitute a quorum for the transaction of ordinary business.

A program was submitted by Mrs. Annie I. Rembert for the care of tubercular soldiers of South Carolina. The program as submitted was adopted, and the Chairman and Secretary were appointed a committee according to the program.

A petition was presented by the Lockhart Mills, Lockhart, S. C., requesting the appointment of a local board of health. The following were appointed, and the Secretary was directed to send them commissions, which has been done: Dr. W. D. Hope, F. D. Lockman, W. D. Dent, W. D. Prescott, G. B. McCombs, J. R. Fant and W. C. Harris, Magistrate.

Dr. Fiench Simpson, U. S. P. H. Service, appeared before the Board, and outlined what should be done in regard to the proper sanitation of the environment of camp zones. It was moved and seconded that Dr. Simpson and the Secretary be empowered to formulate plans for the sanitation of camp zones, and to promulgate such rules and regulations for the government of said zones as may be approved by the Chairman.

The following resolution was introduced and passed: Resolved, That any member or employee of the State Board of Health, who through motives of patriotism shall enlist or accept commission in the U. S. Army, Navy or Marine Hospital Service for the purpose of aiding the United States of America in this war for democracy, shall be considered to be in the status of leave of absence without pay, and upon completion of his duty to the United States, shall resume his position.

A statement was submitted by Dr. Ernest Cooper, Superintendent of the S. C. Sanatorium, of the necessary supplies for the new buildings at the Sanatorium, and the Secretary was directed to purchase these articles, if funds were available.

It was moved and seconded that as the meeting of the American Public Health Association was to be a very important one that two members of the Board would be sent as representatives, and their expenses be paid from contingent fund. The Chairman was authorized to designate two members.

There being no further business before the Board, it adjourned to meet again at the call of the Chairman.

JAMES A. HAYNE,
Secretary.

Attested.

Columbia, S. C., October 4, 1917.

The regular quarterly meeting of the Executive Committee of the State Board of Health was held Thursday, October 4, at 9:30 A. M., at the offices of the Secretary, Palmetto Bank Building, with the following members present: Drs. Robt. Wilson, Jr. (Chairman), D. B. Frontis, C. C. Gambrell, E. A. Hines, Wm. Egleston, W. M. Lester, W. W. Dodson and James A. Hayne, Secretary and State Health Officer.

The minutes of the last meeting were read and approved.

The first business before the Executive Committee was the hearing of a petition submitted by Mr. Wilson and certain citizens of Richland County, requesting the removal of Dr. Ernest Cooper as Superintendent of the South Carolina Sanatorium, on the ground of his being an undesirable citizen. The petition is as follows:

We, the undersigned citizens of Richland County, residing near the South Carolina Tuberculosis Sanatorium, respectfully petition that you will remove Dr. Ernest Cooper as Superintendent of the above named Sanatorium.

Practically all of us own fox hounds and during the time that Dr. Cooper has been Superintendent, probably two years, at least seven hounds have been shot at or around the Sanatorium, four fatally.

During the early part of the present year a valuable hound belonging to Mr. J. H. Wilson was killed, Dr. Cooper informing Mr. Wilson that he had been shot by a patient at the Sanatorium, but declining to give the name of the patient until after suit was brought against him for damages for the killing of the dog. At this time Dr. Samuel E. Harmon and Mr. J. H. Wilson, owners of certain dogs, endeavored to reach an agreement with Dr. Cooper, assuring him that if he would not shoot any more of the dogs that they would be responsible for any damage done and would let drop the matter of dogs already killed. Dr. Cooper declined to agree to this and stated he would shoot any dogs that came around. Subsequently and on or about the 17th of

April, Dr. Cooper shot and killed a valuable hound belonging to Dr. Samuel E. Harmon and Mr. J. H. Wilson. He was tried for this offense in the Court of General Sessions for Richland County, convicted, given a sentence of fifteen days or fine of twenty-five dollars. Since the aforesaid conviction two more dogs have been shot, one probably fatally, at or near the Sanatorium, and while your petitioners have no absolute proof that same was done by Dr. Cooper, from his former actions and his attitude to Mr. Wilson and Dr. Harmon with reference to the dogs they believe that the shooting of the last two mentioned dogs was by or at the instance of Dr. Cooper.

Should you think that the above is not sufficient grounds for removing we urge that you will instruct Dr. Cooper to have due regard for the rights of the property of others and to reimburse us for dogs that he killed.

This was signed by one hundred and seventy citizens.

Dr. Harmon and Mr. Wilson appeared before the Board and submitted their evidence, to which Dr. Cooper made reply.

The following resolution was introduced by Dr. Egleston and unanimously passed by the Board:

Resolved: That the Executive Committee of the State Board of Health after a full hearing and careful consideration of the facts submitted, declined to grant the petition, except to this extent: that Dr. W. M. Lester and Dr. Jas. A. Hayne be asked to endeavor to effect some amicable agreement between Dr. Cooper and Mr. Wilson and Dr. Harmon that will prevent further friction.

The resignation of Mrs. Annie I. Rembert as Field Secretary of the South Carolina Sanatorium was received and accepted with regret. It was moved and seconded that this position be not filled, and that if Mrs. Rembert desired to again apply for the position, her application would receive favorable consideration.

Dr. Fiench Simpson appeared before the Board and reported that the anti-malarial work in the extra cantonment area at Camp Jackson was being satisfactorily carried out.

Permission was given to Dr. L. A. Riser to purchase a moving picture film to be used throughout the State on educational work on the prevention of typhoid fever; said film to be paid for by the State Board of Health out of the Contingent Fund.

It was moved, seconded and passed that Dr. E. A. Hines of Seneca be sent as an official representative of the State Board of Health to the Conference on Infant and Child Welfare, to be held at Richmond, Va., and necessary traveling expenses to be defrayed by the State Board of Health.

There being no further business the Executive Committee adjourned to meet at the call of the Chairman.

JAMES A. HAYNE, M. D.,
Secretary.

Attested.

Columbia, S. C., December 12, 1917.

The regular quarterly meeting of the Executive Committee of the State Board of Health was held Wednesday, December 12, at 2 P. M., at the offices of the Secretary, Palmetto Bank Building, with the following members present: Drs. Robt. Wilson, Jr. (Chairman), D. B. Frontis, C. C. Gambrell, E. A. Hines, Wm. Egleston, W. W. Dodson and James A. Hayne, Secretary and State Health Officer.

The minutes of the last meeting were read and approved.

The first business before the Executive Committee was the consideration of quarantine of Camp Jackson for Cerebro-Spinal Meningitis. Brigadier General Barth, U. S. A., and Col. Nelson, Medical Corps, U. S. A., appeared before the Executive Committee and Gen. Barth submitted a general order that he had issued providing for proper quarantine regulations. It was moved and seconded that the State Health Officer be instructed to modify or increase this quarantine after consultation with Col. Nelson, if subsequent conditions at Camp Jackson warranted such action.

Mrs. Annie I. Rembert applied for the position of Field Secretary for the South Carolina Sanatorium, and was elected at her former salary.

Dr. Wm. Egleston introduced a resolution, which was passed, that the inspections of the Standing Committees on State Penal and Charitable Institutions, and State Schools and Colleges be made early enough for reports to be read at the October meeting.

The next business was the reading of the reports of the different departments. The General Report—Epidemic and Endemic Diseases—by James A. Hayne, M. D., Secretary State Board of Health and State Health Officer. Report of the Laboratory, by F. A. Coward, M. D., Director. Report of the Bureau of Vital

Statistics, by C. W. Miller, Chief Clerk. Report of the Analysis of Water, by F. L. Parker, State Chemist and Bacteriologist. Report of the Committee on State Penal and Charitable Institutions, by C. C. Gambrell, M. D., Chairman. Report of the Committee on Sanitary Inspection of State Schools and Colleges, by E. A. Hines, M. D., Chairman. Report of E. A. Hines, M. D., official delegate of the Executive Committee of the State Board of Health to the American Association for the Study and Prevention of Infant Mortality, Richmond, Va. Report of the South Carolina Sanatorium at State Park, by Ernest Cooper, M. D., Superintendent. Report of the Field Secretary for the South Carolina Sanatorium by Mrs. Annie I. Rembert. Report of the Director of Community Units, by L. A. Riser, M. D. Report of the Greenville County Health Officer, by S. J. Taylor, M. D.

These reports were accepted as information and ordered printed in the Annual Report.

Owing to the increased cost of living, the State Health Officer was directed in making up the annual budget for the General Assembly to ask for increase in salary of Assistant Bacteriologist to eighteen hundred dollars and salary of Clerk to one thousand dollars.

It was moved and seconded that the Executive Committee hold a meeting as soon as the Legislature adjourned, for the purpose of considering plans for the coming year.

There being no further business the Executive Committee adjourned.

JAMES A. HAYNE, M. D.,

Attested.

Secretary.

REPORT OF DIRECTOR OF LABORATORY.

F. A. COWARD, M. D.

Columbia, S. C., January 1, 1918.

*To the Chairman and Members of the Executive Committee,
South Carolina State Board of Health:*

Gentlemen: I submit herewith my report of work done in your Laboratory during the year 1917.

Personnel.

The Laboratory force consists of Director, Bacteriologist, one part time Assistant, Stenographer and Porter. This is the minimum with which we can perform the work now required of us.

Equipment, Etc.

The Laboratory is in good physical condition and repairs needed are few and unimportant. The present unusual conditions due to the war have had their effect here, as elsewhere—and increased funds will be necessary for the purchase of animals, chemicals, glassware, etc.

Routine Activities.

Typhoid Vaccine: Twenty-eight thousand one hundred and sixty-six ampules of triple vaccine were sent out—the bulk of this being obtained from E. R. Squibb and Company—for the reason that the price offered by them makes the purchase of the vaccine more economical than its preparation in our Laboratory.

Diagnostic Work: Thirteen thousand three hundred and eighty-six diagnostic tests were made during the year, the greatest number in the history of the Laboratory. The attached tabular statement gives the details of the tests.

Pasteur Department.

A large increase is noted in this work, five hundred and fifty-two cases having received the preventive treatment. There was one failure of the treatment during the year, the case of a child of four years.

A great economy in animal purchase and keep has been accomplished by a modified system worked out in our Laboratory. Further work in our Laboratory will be done if possible in the attempt to shorten the time necessary for immunization.

Tables detailing the year's work are appended.

Respectfully submitted,

F. A. COWARD, M. D.,
Director of Laboratory.

WASSERMANN TESTS.

	Positive.	Negative.	Total.
Blood.....	1,326	3,225	4,551
Spinal fluid.....	2	51	53
	<hr/> 1,328	<hr/> 3,276	<hr/> 4,604
Hydrocele fluid.....	....	1	1
Ascitic fluid.....	....	1	1
	<hr/> 1,328	<hr/> 3,278	<hr/> 4,606

Number of specimens unfit for examination..... 164

PASTEUR TREATMENT.

Total number of patients receiving treatment..... 552

LOCATION OF BITES.

Face and neck.....	13
Hand and foot.....	78
Through clothing.....	1
Leg and arm.....	44
Doubtful exposure.....	10
None (wanted treatment).....	1
No information.....	405
	<hr/> 552

WHERE TREATED.

Treated at home.....	521
Treated at laboratory.....	31
	<hr/> 552

SUMMARY OF LABORATORY WORK FOR THE YEAR 1917.

Kind of Specimen, or Examination.	Positive.	Negative.	Doubtful.	Total.
Sputa for B. tuberculosis.....	203	764	...	972
Hookworm ova.....	83	249	...	332
Rabies.....	211	114	1	326
Gonococcus.....	19	56	...	75
B. diphtheria.....	71	221	...	292
B. coli in water.....	127	78	...	205
Plasmodium malaria.....	25	356	...	381
T. B. in discharges other than sputa.	2	15	...	17
Miscellaneous Pathogenic Organisms—				
Meningococcus.....	3	5	...	8
Diplococcus.....	1	...	...	1
Staphlococcus.....	1	...	...	1
Smear from pus.....	...	2	...	2
Miscellaneous Intestinal Parasites Other Than Hookworm—				
Amebae.....	2	29	...	31
Tapeworm.....	1	...	...	1
Cultures—				
Blood culture.....	...	1	...	1
Culture from pus for streptococci...	1	...	...	1
Culture from pleuritic effusion...	...	1	...	1
Miscellaneous Specimens—				
Spinal fluid for bacteria.....	...	3	...	3
Prostatic fluid.....	1	...	...	1
Kaustinized sewage.....	1	2	...	3
Widal Tests—				
B. typhosus.....	733	2,275	55	3,063
B. paratyphoid.....	419	2,610	34	3,063
	<hr/> 1,909	<hr/> 6,781	<hr/> 90	<hr/> 8,780

TYPHOID VACCINE.

Number of ampules sent out during 1917..... 28,166

REPORT OF DELEGATE TO THE AMERICAN ASSOCIATION
FOR THE STUDY AND PREVENTION
OF INFANT MORTALITY, RICHMOND,
VA., OCTOBER 15-17, 1917.

Inspected.

As was to be expected at this time, the program of this great National Child Welfare Association was mainly concerned with war problems. There were about three hundred delegates present from more than twenty States and quite a number from the Dominion of Canada.

It was clear that practically every delegate was convinced that the welfare of the mother and child during the war should claim immediate attention from all the existing agencies doing this work and that wherever feasible, new measures should be instituted. We were impressed with the great importance of the Public Health Nurse in the whole scheme of Child Welfare.

We have long reluctantly been obliged to admit that the South has not been as progressive in Child Welfare Work as she might have been. This great Association met only this year for the first time in the Southern section of the country. Virginia, however, proved to be an ideal host and the city of Richmond especially so. In justice to the South and to the State of Virginia it should be said, that considerable credit should be given for the development of Child Welfare Work as brought out at this convention. Virginia has in round numbers one hundred public health nurses scattered throughout the State, many of them in the small towns and rural districts.

Upon investigation I found that Mrs. Jane B. Rawson was the State Supervisor of Public Health Nursing, having charge of this division of the work of the State Board of Health. Her salary is paid jointly by the State Board of Health and the Metropolitan Life Insurance Company.

Her duties are to coordinate and extend public health nursing in the State. The salaries of the public health nurses in many communities are paid by various agencies. Frequently jointly by private parties, municipalities and County Commissioners.

The State Board of Health of Virginia was progressive enough to give a course of lectures on Public Health Nursing this year, lasting six weeks. In addition there has been established at Richmond a school of Social Economy. It is highly probable

that such schools will be encouraged and made use of in different sections of the country by the Red Cross.

The whole scheme of Child Welfare in Virginia practically revolves around the school house and evolved from the Medical Inspection of Schools inaugurated in certain counties some years ago.

North Carolina has recently been very active in establishing public health nursing, centered somewhat around the tuberculosis problem.

Wisconsin levies one-fourth of a cent on the thousand for public health nursing and has about one hundred and twenty nurses at the present time.

Canada has established recently Bureaus of Child Welfare in several provinces as was reported at this meeting, stimulated by the urgencies of the war work.

Reports were had from various countries already at war, and it would appear that about the first thought in all these countries was for the welfare of the mothers and children. The motto of France as early as August, 1914, may be summed up as follows: "To be sure that no woman is ignored and no child is forgotten." May the State Board of Health of South Carolina not with propriety adopt a similar motto?

The Red Cross reported to this convention that that great organization had made special provision for the women and children and proposed to create Bureaux of Child Welfare in the warring countries, and to associate Dispensaries with the work of the Rockefeller Fund and extend its relief work to the remotest bounds of every country. Major Murphy, it will be remembered, cabled early an appeal for special help to be given children of Belgium and France in these words: "There is urgent need for effective work among children, special need for doctors and nurses for work with mothers and children."

It would of course take up too much of your time to report extensively on a National Association of such proportions as this has now become, but by special request the Secretary, Miss Gertrude B. Knipp, has abstracted for me the entire proceedings for publication in the Journal of the South Carolina Medical Association, December number. This leads me to inform you that the December number of the Journal will be devoted entirely to Child Welfare Work. We have secured a number of most valuable special contributions as well as the papers read in

Symposium on Infant Mortality at the April meeting of the State Medical Association, 1917. Some of these high authorities, notably Dr. Grace Meigs of the United States Children's Bureau, heartily approved of the establishment of a division of child hygiene by the State Board of Health of South Carolina.

In conclusion, I wish to quote briefly from a letter written by Dr. C. E. Terry in charge of the public health propaganda of the Delineator, New York City. Dr. Terry offers to South Carolina the services of the Child Welfare Sanitary Corps in connection with their seventh baby campaign. One of the most recent movements undertaken for the conservation of child life. This survey will be made within cities and towns of between ten and forty thousand population.

I wish to submit to the Board for approval the proposition to establish a Bureau of Child Hygiene and also to invite Dr. C. E. Terry into our State for the purpose of making the sanitary survey relating to Infant and Child Welfare.

The last meeting of the State Medical Society approved of the continued efforts to have the Medical Inspection of Schools law passed. Inasmuch as this matter will be brought forcibly to the attention of the profession in the December Journal, especially quoting the law recently enacted by our sister State of North Carolina and put in effect November 1st, the approval of this Board will be helpful.

Respectfully submitted,

E. A. HINES, M. D.

REPORT OF COMMITTEE ON SANITARY INSPECTION OF STATE SCHOOLS AND COLLEGES.

Committee:

E. A. HINES, M. D. (Chairman),

W. J. BURDELL, M. D.,

D. B. FRONTIS, M. D.

Sanitary Inspection of Cedar Springs Institute for the Deaf, Dumb and Blind, Spartanburg, S. C.

We visited Cedar Springs Institute April 18th, 1917, and found that the administration building under construction at our former visit practically completed.

There had been practically no sickness among the students the past year. With the completion of the administration building the entire institution will work more smoothly along all lines. It is evident that since this State has wisely classed this institution as educative instead of penal, the management has been greatly encouraged in its work. The institution had the benefit of a visit from the entire State Medical Association on this date, and many of the members expressed amazement at the marvelous progress made by those poor unfortunate children along educational lines.

In conclusion, I herewith incorporate some of the words of commendation by Dr. C. W. Kollock, Charleston, S. C., on that occasion: "It is of the greatest importance that the men of this Association should visit this school, because I think very few have any idea of the good work being done there, and the importance of that work. It is very interesting to begin with, and then again, we should take into consideration that these children that are deaf, dumb and blind are being taught, not only perhaps to speak and to amuse themselves, but further, they are being made producers, which if they were allowed to remain in the condition they are in, they would not be. This country is now paying a number of million of dollars annually for the support of blind people, one-fourth of whom are blind from one cause—a cause that should have been prevented, and a cause that should have been cured when it started. I refer to ophthalmia neonatorum. Therefore, we should visit in this place, and we would, therefore, be in a better position to insist upon our representative giving it good support."

Respectfully submitted,

E. A. HINES, M. D.

Sanitary Inspection of Clemson College.

Clemson College was inspected December 20th, 1917. We found that there had been very little sickness during the present term. No typhoid cases, and less malaria than usual. None of the contagious diseases except German measles, and only a few cases of this disease. The sanitary conditions of the college were found to be good. The local board of health had been more aggressive during this term than in previous years, especially in regard to destruction of breeding places for flies.

We looked into the question of the food given the cadets, and found that the price of board had been raised from nine to twelve dollars a month. With this increased price, the daily ration has been kept well balanced and abundant. We present herewith the menu for the day preceding our visit, giving the three meals for December 19th, 1917:

Breakfast.	Dinner.	Supper.
Fried steak and liver	Rice	Boiled ham
Fried Irish potatoes	Butter beans	Baked potatoes
Hominy	Roast beef	Hominy
Wheat bread	Meat pie	Stewed peaches
Buttered toast	Scalloped potatoes	Hot rolls
Coffee with cream	Stewed tomatoes	Wheat bread
Syrup	Corn bread	Syrup
Gravy	Wheat bread	Gravy
	Syrup	Butter
	Gravy	

There are seven hundred and seventy-five students. This number can be comfortably housed with no overcrowding in the rooms.

We recommend that the screening of the dairy be carefully looked after, and that the walls and ceiling be re-calclimined and kept in the best of repair.

We commend the local Board of Health for its interest in the health of the college community and urge that regular meetings be held throughout the year.

Respectfully submitted,

E. A. HINES, M. D.

Sanitary Inspection of Winthrop College.

We visited Winthrop College November the 23rd. A more careful inspection was made of each dormitory than usual in order to determine the extent of overcrowding. While the exact number of rooms was not noted, it was clear that many have three students per room. This condition was more apparent than has been the case hitherto. An additional dormitory is, therefore, the only solution to this problem; in fact, is an urgent necessity.

The new gymnasium, which includes one excellent swimming pool, is now in splendid working order. We were favorably impressed with the thorough instruction given in this department of physical culture. Costly buildings and equipment go for naught in the absence of skilled instructors. Winthrop is fortunate in this regard.

The infirmary is now in charge of Dr. Allen, whose broad training in medical mission fields especially fits her for this peculiar work. We encouraged the installation of a clinical laboratory and it is probable the apparatus will be ordered at once. Little sickness was reported this term.

We reiterate our report of last year, that the dairy barn can not be made sanitary in the modern sense, though improvement was noted over last year. The food given the pupils is ample and of good quality, notwithstanding the strain on all such institutions from the increased cost of living. This feature of our inspection we have stressed more and more as war conditions have continued. At this visit we talked with quite a number of pupils incognito, endeavoring to learn their point of view. Without exception the freshmen we interviewed had gained weight. A more detailed investigation subsequently discloses the actual facts as follows:

The director of physical training, who with the resident physician gives every new student a physical examination upon her entrance to the college, weighed the freshmen when they entered in September, and has just weighed them again, December 6th and 7th. Of the total number weighed, 297, 259 have made an average gain in weight of 7 pounds from September 19th up to December 7th. Of the number weighed 38 lost in weight. Of the 38 who lost in weight 8 board in the city. Of the 30 boarding in the college losing weight, one girl lost 32 1-4 pounds as a result of special work given her to enable her to reduce her weight. She weighed 230 1-2 pounds upon admission to the college. The average loss in weight of the other 29 girls was 2 1-2 pounds.

At various times in previous years we have gone over very carefully the menu record which has been kept day by day for at least ten years. The menu is herewith given for November 23rd, 1917, the date of our official visit:

Breakfast.	Dinner.	Supper.
Breakfast bacon	Steak	Boston baked beans
Fruit—apples	Gravy	French rolls
Grits	Escalloped white	Sliced bread
Biscuit	Potatoes	Butter
Sliced bread	Cold slaw	Stewed peaches
Butter	Corn bread	Coffee
Syrup	Pickle	Milk
Coffee—tea		

There are now in round numbers 1,000 pupils at Winthrop College, and we know of no institution more carefully managed from the administrative point of view.

Respectfully submitted,
E. A. HINES, M. D.

REPORT ON INSPECTIONS OF STATE INSTITUTIONS.

The Citadel.

Accompanied by Dr. R. S. Cathcart, physician to the Citadel, inspection of the sanitary condition of this institution was made December 11, 1917.

The dormitories were found to be clean and contents orderly, as has always been the case, but appearance much improved by new floors. Sanitary drinking fountains are on each floor, the water coming from an artesian well on the grounds. Class-rooms, recreation hall, bath-rooms and closets all clean and well kept, dining-room and kitchen clean and free from flies. A small local incinerator is used to destroy all refuse about the place.

There is some measles of a very mild type in the institution. Cases are promptly isolated in the hospital of the institution. There has been one case of scarlet fever, but prompt isolation by Dr. Cathcart prevented any further development.

D. B. FRONTIS, M. D.

The Medical College of the State of South Carolina.

The South Carolina Medical College was also inspected on December 11, 1917.

Students do not board in the college, consequently the only matters of sanitation to be considered are ventilation, drinking water and the closets. The latter are clean and well flushed.

Drinking water is the same as that of the city of Charleston, and is examined as provided by law. The laboratories and recitation rooms are all large, with abundant air space, and special ventilators are provided in all laboratories where there might at times be noxious gases.

While not strictly a sanitary matter, we feel that we ought to commend the neatness and orderliness of every part of this building. No scraps of paper or refuse were to be seen anywhere, desks and tables were all clear. Students are required to put all apparatus in place, some of it under lock and key, at the close of their work. This develops habits of orderliness that should be worth much to them in their future life. No defacing of furniture or walls of the building were to be seen anywhere. This speaks well for the students, and for the efficiency of the management of the institution. We were indebted to Dr. Francis L. Parker for the courtesy of showing us through the Medical College.

D. B. FRONTIS, M. D.

The University of South Carolina.

The University of South Carolina was inspected December 12th, 1917. We found the general sanitary conditions good. Unfortunately, at this time, many water pipes were frozen, and the closets had to be flushed with buckets of water brought by hand. Manifestly it is impossible to do this properly when the closets are used by so many. The building in which the closets are placed should be provided with heat for the comfort of the users, and to prevent the pipes from freezing. The heating plant of the University should be enlarged, so that the buildings could be heated from one central plant. The health of the students was reported good.

D. B. FRONTIS, M. D.

REPORT OF COMMITTEE ON SANITARY INSPECTION
OF STATE PENAL AND CHARITABLE
INSTITUTIONS.

Committee:

C. C. GAMBRELL, M. D., Cairman,
WM. EGGLESTON, M. D.,
W. M. LESTER, M. D.

State Hospital for the Insane.

Your committee has inspected the State Hospital several times during the year and it is pleased to report extensive improvements in many ways. One of the most notable improvements is the manner in which the Medical Department is conducted. All the members of the medical staff are now resident officers and devote their entire time to the work. Daily staff meetings, except Sunday, are held, and all patients received are carefully examined, both physically and mentally. The information obtained is typewritten, bound in neat form and will prove of great value to the hospital as permanent records.

Among the permanent improvements which have been undertaken, some of which are now nearing completion, are the remodeling of eleven of the white male wards, the erection of a central kitchen with new equipment, the building of a concrete dining-room for white female and male patients, a new dairy and the installation of a cold storage and ice plant.

Your committee desires to express its gratification at the improvements found, which meet the modern idea of sanitation in every respect.

We find that many temporary improvements have been made, which add materially to the care and comfort of the patients.

All open cases of tuberculosis in the various departments have been isolated and are being cared for on open-air porches adjacent to the wards. This arrangement, while an improvement, is not, in the opinion of your committee, sufficient to meet the needs of this class of patients; they should be cared for in pavilions specially constructed for them.

Female Department.—We found that all of the female wards in the main building are still overcrowded and in unsanitary condition, and this is made more apparent since this completion of the new ward on the male side; therefore we recommend that the remodeling of the female wards be done as soon as possible. We are glad to note the remarkable decrease of the death rate of the institution for the past year, and we are quite certain that it, in part, can be attributed to recent sanitary fixtures and close attention to sanitary measures in the institution. We most heartily commend the activities along public health lines in this institution, and recommend that the Legislature give them such financial aid as is necessary to carry out the previously planned policy of the institution.

C. C. GAMBRELL, M. D.

State Penitentiary.

Your Committee on State Penal and Charitable Institutions beg leave to make the following report:

First: That the Tuberculosis Hospital be entirely renovated.

Second: That the patients be given such diet as is suitable for tuberculosis. That is, that every meal contain meat and eggs and other nutritious food cooked separate from the general fare provided for the prisoners. Also that milk be provided in quantity for use at the meal and between meals; also that plenty of butter be provided. If these men are worth undertaking to save it is worth going about it in a proper way. There should also be stationed in this hospital a nurse with some experience in the care of tubercular patients, and this nurse should have charge of the patients day and night under the directions of the doctor. Of course, I realize that this nurse would have to be a man, but I also believe that the unfortunate patients of this type ought never to feel that they are prisoners, and the very best care obtainable should be thrown around. This is far more necessary than with those patients who have some place of their own and some idea as to where and when they will go and what they care to do for themselves.

Third: I would renew our old suggestion, that the women be provided with new quarters at once.

Old Guard Quarters: This is an old frame building within the fire range of the women's quarters, and I recommended in my 1916 report that this building be torn down, which has not been done.

C. C. GAMBRELL, M. D.

Old Soldiers' Home.

This institution was inspected by your committee December 11th. We found the sewerage system inadequate and very poorly attended to and we would recommend that this be called to the attention of those in charge and that the next General Assembly be asked to make an appropriation to have the institution equipped with sufficient toilets and bath-rooms.

The greatest need of this institution is a Trained Nurse, and that she be given sufficient help and means to make these old men comfortable during their remaining days. Most of the inmates of this institution are sick or suffering from wounds or infirma-

ties peculiar to the aged and they need constant care and attention. The present infirmary is not near large enough nor properly equipped for this class of occupants.

This institution is not receiving that scientific care that it should.

C. C. GAMBRELL, M. D.

State Reformatory.

Hartsville, S. C., November 27, 1917.

I have this day examined the Reformatory at Florence, South Carolina, and have the following to report:

Conditions in general within and without the buildings are very good. The new building is a sanitary one in every way, and of much better construction from the health point of view than the others.

The diet has been made much more liberal since our last inspection, and on this occasion, as on former ones, there are no evidences of lack of nourishment on the part of the inmates. The morbidity bears testimony to the fact that the food is sufficient and nourishing, and that the inmates are well cared for.

We earnestly recommend again that a central dining-room and kitchen be built for the institution, and if the suggestion is allowed, we might direct attention to the fact that the old building, both insanitary and insecure, would furnish the largest part of the material needed for the construction of such a central dining-room and kitchen.

The new arrangements of the barns and stables will add materially to health conditions by removing these buildings further away from the strictly dormitory portion of the institution.

WM. EGLESTON, M. D.

REPORT OF BUREAU OF VITAL STATISTICS.

Columbia, S. C., December 11, 1917.

Dr. James A. Hayne, Secretary, State Board of Health, Columbia, S. C.

Dear Dr. Hayne: Herewith please find my report for the ten months ending October 31, 1917.

You will note that the death registration is better this year than in 1916. Notwithstanding the natural increase in population, estimated by the United States Census Bureau to be 17,730. The deaths returns for 1917 show an increase over 1916 of 1,003. The number of birth returns has decreased 3,500. The returns to April 30th show a slight increase over the same period for last year, but since that date have steadily fallen off. This can, in a measure, be accounted for by the fact that about 150 physicians in the State have entered the United States army or expect a call at any moment. Some of our registrars have also been drafted.

I note that there has been a decrease in the death rate of most of the communicable diseases. This should be encouraging to the State Board of Health, showing that their work, along educational lines, has not been in vain.

Registration has not improved in Barnwell, Saluda and Fairfield Counties. These counties are sparsely settled in places and by letter, my only means of communication, I can not stir up the requisite amount of interest.

The usual number of packages of supplies were sent out.

The young ladies employed in the office have co-operated finely in the work.

Very truly yours,

C. W. MILLER,
Chief Clerk.

C.W.M.-c.

TOTAL NUMBER OF BIRTHS AND DEATHS FOR SOUTH CAROLINA
FROM JANUARY 1, 1916, TO OCTOBER 31, 1916.

Counties.	Deaths.	Births.	S. Births.
Abbeville.....	333	810	57
Aiken.....	377	801	44
Anderson.....	739	1,798	84
Bamberg.....	183	505	30
Barnwell.....	213	569	33
Beaufort.....	390	469	68
Berkeley.....	334	581	44
Calhoun.....	247	505	60
Charleston.....	1,803	1,759	251
Cherokee.....	264	743	37
Chester.....	367	652	41
Chesterfield.....	283	880	37
Clarendon.....	447	895	79
Colleton.....	339	644	52
Darlington.....	481	1,088	79
Dillon.....	234	512	34
Dorchester.....	208	411	29
Edgefield.....	219	634	30
Fairfield.....	342	640	27
Florence.....	619	1,450	100
Georgetown.....	325	395	46
Greenville.....	862	1,985	113
Greenwood.....	419	840	45
Hampton.....	221	507	31
Horry.....	526	1,038	54
Jasper.....	120	200	7
Kershaw.....	275	651	49

Counties.	Deaths.	Births.	S. Births.
Lancaster.....	350	649	42
Laurens.....	438	1,012	55
Lee.....	317	749	52
Lexington.....	254	676	41
Marion.....	280	641	41
Marlboro.....	403	986	66
Newberry.....	347	777	39
Oconee.....	286	796	35
Orangeburg.....	750	1,745	150
Pickens.....	270	841	38
Richland.....	1,166	1,421	126
Saluda.....	152	389	16
Spartanburg.....	911	2,188	118
Sumter.....	605	1,193	103
Union.....	309	666	45
Williamsburg.....	417	1,092	84
York.....	544	1,123	58
Total.....	18,669	38,901	2,670

Total deaths.....	18,669	Rate.....	13.9
Total births.....	38,901	Rate.....	29.0
Total still births.....	2,670	Rate.....	2.0

TOTAL NUMBER OF BIRTHS AND DEATHS IN SOUTH CAROLINA FROM
JANUARY 1 TO OCTOBER 31, 1917.

Counties.	Deaths.	Births.	S. Births.
Abbeville.....	330	662	43
Aiken.....	359	666	48
Anderson.....	789	1,685	93
Bamberg.....	163	389	27
Barnwell.....	236	505	58
Beaufort.....	338	377	54
Berkeley.....	319	511	40
Calhoun.....	302	475	54
Charleston.....	1,645	1,647	237
Cherokee.....	324	706	35
Chester.....	383	611	38
Chesterfield.....	277	819	39
Clarendon.....	495	757	47
Colleton.....	291	639	58
Darlington.....	654	1,026	76
Dillon.....	259	519	33
Dorchester.....	197	306	35
Edgefield.....	208	410	35
Fairfield.....	224	574	46
Florence.....	676	1,174	67
Georgetown.....	332	443	39
Greenville.....	930	1,635	110
Greenwood.....	391	694	48
Hampton.....	270	507	36
Horry.....	616	958	55
Jasper.....	95	189	4
Kershaw.....	242	562	16
Lancaster.....	303	694	37
Laurens.....	481	954	41
Lee.....	339	624	40
Lexington.....	292	720	27
Marion.....	281	582	34
Marlboro.....	394	738	63
Newberry.....	381	693	35
Oconee.....	357	765	28
Orangeburg.....	803	1,613	120
Pickens.....	255	827	32
Richland.....	1,279	1,246	116
Saluda.....	119	390	18
Spartanburg.....	1,131	2,018	134
Sumter.....	723	1,096	101
Union.....	276	608	31
Williamsburg.....	434	969	71
York.....	557	963	53
McCormick.....	114	356	20
Total	19,672	35,401	2,490

**BIRTHS IN SOUTH CAROLINA, ACCORDING TO RACE AND SEX, FOR
NINE MONTHS ENDING SEPTEMBER 30, 1917.**

	White.		Black.
Male.....	7,777	Male.....	8,508
Female.....	7,002	Female.....	8,031
Total.....	14,979	Total.....	16,539
	Unknown.....		112

**COMPARATIVE STATEMENT OF DEATHS FOR FOLLOWING DISEASES
FROM JANUARY 1 TO OCTOBER 31, 1916 AND 1917.**

Diseases.	1916.	Rate Per 100,000	1917.	Rate Per 100,000.
Tuberculosis pulmonalis.....	1,377	111.4	1,356	100.1
Tuberculosis (other forms).....	115	...	124	9.1
Pellagra.....	553	41.2	544	40.2
Diphtheria.....	59	4.4	47	3.5
Scarlet fever.....	10	.7	6	.4
Measles.....	10	.7	146	10.8
Typhoid fever.....	413	30.7	396	29.2
Smallpox.....	2	.15	...	...
Cancer and malignant tumors....	426	31.8	430	31.7
Malaria.....	233	17.4	259	19.1
Meningitis cerebro S.....	20	1.9	33	2.4
Whooping cough.....	123	9.2	76	5.6
Pneumonia.....	960	71.5	1,064	78.5
Pneumonia, broncho.....	221	16.4	388	28.6
Pneumonia, hypostatic.....	12	8.9	11	.8
Pleurisy.....	26	1.9	15	1.1
Diseases, circulation.....	1,939	148.8	2,140	158.2
Diseases, kidneys.....	1,287	96.6	1,425	105.2
Syphilis.....	53	3.9	51	3.8
Syphilis, congenital.....	53	3.9	43	3.2
Tetanus.....	21	1.6	25	1.8
Tetanus, neonatorum.....	11	.81	21	1.4
Dysentery.....	330	24.6	433	32.2
Dysentery, ameobic.....	10	.7	22	1.6
Scurvy.....	1	.075	1	.07
Intestinal diseases.....	1,037	77.4	1,375	101.5
Erysipilas.....	11	.81	24	1.6
Homicide.....	172	12.7	157	11.6
Suicide.....	40	3.0	33	2.4
Railroad accidents.....	55	4.1	84	5.6
General accidents.....	232	17.3	216	15.9
Lightning.....	4	1.0	38	2.8
Legal electrocutions.....	2	.15	2	.13
Paralysis.....	31	1.6	8	.5

**DEATHS IN SOUTH CAROLINA, ACCORDING TO RACE AND AGE, FOR
TEN MONTHS ENDING OCTOBER 31, 1916, AND 1917.**

Age.	White—Male		Black—Male	
	1916.	1917.	1916.	1917.
Under 1 year.....	838	899	1,602	1,717
1 to 5 years.....	440	505	711	829
5 to 10 years.....	83	109	151	193
10 to 20 years.....	135	170	371	436
20 to 30 years.....	200	231	576	595
30 to 40 years.....	223	189	508	460
40 to 50 years.....	237	239	430	413
50 to 60 years.....	327	321	458	392
60 to 70 years.....	455	456	411	469
70 to 80 years.....	347	385	337	346
Over 80 years.....	161	147	239	240
Unknown.....	13	17	73	40
Total.....	3,459	3,668	5,867	6,130
Age.	White—Female		Black—Female	
	1916.	1917.	1916.	1917.
Under 1 year.....	631	680	1,229	1,339
1 to 5 years.....	367	454	596	721
5 to 10 years.....	84	83	180	188
10 to 20 years.....	143	154	479	543
20 to 30 years.....	278	256	900	897
30 to 40 years.....	302	310	681	666
40 to 50 years.....	257	287	514	511
50 to 60 years.....	259	257	380	419
60 to 70 years.....	372	428	373	366
70 to 80 years.....	422	417	287	328
Over 80 years.....	264	252	246	275
Unknown.....	27	10	59	30
Total.....	3,406	3,588	5,924	6,283
Indians.....	13		3	

DISEASES FOR TEN MONTHS ENDING OCTOBER 31, 1917.

	Number.	Cases Reported.
Diphtheria.....	47	1,167
Measles.....	146	4,766
Meningitis cerebro S.....	33	11
Pellagra.....	544	306
Poliomelitis.....	8	13
Scarlet fever.....	6	134
Smallpox.....	.....	92
T. B., pulmonalis.....	1,356	229
T. B., other forms.....	124	.....
Typhoid.....	396	396
Whooping Cough.....	76	396
Malaria.....	.....	852

COMPARATIVE STATEMENT OF DEATHS IN THE FOLLOWING CITIES,
FROM JANUARY 1, TO OCTOBER 31, 1916 AND 1917.

Cities	1916	1917
Abbeville.....	72	74
Aiken.....	51	63
Anderson.....	231	244
Bennettsville.....	52	42
Camden.....	72	69
Charleston.....	1,283	1,291
Cheraw.....	36	40
Chester.....	89	97
Clinton.....	46	64
Columbia.....	940	1,044
Darlington.....	61	70
Easley.....	48	34
Florence.....	167	221
Gaffney.....	77	82
Georgetown.....	110	107
Greenville.....	273	287
Greenwood.....	93	115
Laurens.....	74	87
Marion.....	57	51
Newberry.....	73	74
Orangeburg.....	87	102
Rock Hill.....	120	131
Spartanburg.....	263	313
Sumter.....	184	176
Union.....	85	65
Total.....	4,644	4,843
Increase for 1917—299		

C. W. MILLER,
Chief Clerk,
Bureau Vital Statistics.

REPORT OF SOUTH CAROLINA SANITORIUM.

Following is the report of Dr. Ernest Cooper, Superintendent of the South Carolina Sanatorium, delivered to the State Board of Health at its annual meeting today:

Since the last annual report 81 patients have received treatment at the Sanatorium. Of these 43 were men and 38 women. There were thirteen who did not remain more than a month. Upon admission the classification was as follows: Incipient, 13; moderately advanced, 39; far advanced, 37. Their condition at present or upon discharge is as follows: Arrested, 11; quiescent, 8; improved, 30; not improved, 23. No deaths have occurred at the

Sanatorium, but nine of the far advanced patients have died after returning home.

Twenty-six counties have been represented. The average gain in weight by those who remained more than a month has been 9 3-4 pounds.

Our garden furnished us with vegetables during the summer. Without extra hired help 39 gallons of tomatoes, 6 gallons of okra and tomatoes, 44 gallons of blackberries, 24 gallons of apples, 151 gallons of pears, 199 gallons of beans and 200 pounds of kraut have been put up. Our fall garden and sweet potato crop were cut short by the long draught. Fifty bushels of sweet potatoes were harvested.

We have raised hogs, furnished 1,368 pounds of pork last winter, sold 43 pigs for \$148.00, have 17 brood sows, 21 pigs and 19 shoats fattening for this winter's needs. With additional fencing and housing better returns than this can be secured.

Milk has been supplied by the institution's own cows. There is need for a modern cow barn, as we have not sufficient shelter to house our cattle.

The new buildings provided by the last Legislature are not completed. When finished, we can accommodate 24 bed patients, bringing the capacity of the institution up to 56 beds. The dining-room will seat 100. These buildings are modern in every respect, completely screened, equipped with steam-heat, hot and cold water, electric lights, fans and annunciators.

Equipment for one wing of the Infirmary has been bought. Much of it has been received, and the remainder of it is in transit. Kitchen fixtures have been provided. The new dining-room has not been furnished.

It is hoped that the cold storage plant for which we have specifications can be installed at an early date. It will be far more economical and much more convenient than the present method of hauling ice from Columbia.

There is urgent need for fire protection, as we have only frame buildings. Chemical fire extinguishers or a sprinkler system should be provided. Additional houses for servants are needed, and those we have are in need of repair.

There was \$146.10 cash on hand at the beginning of the fiscal year. Collections from all sources have amounted to \$7,922.38. Of this amount \$7,519.70 was collected for board. I have expended \$3,476.48 for supplies of all kinds, refunded \$41.45 to pa-

tients, and delivered \$4,550.55 to Dr. Hayne, and have \$31.75 cash on hand.

At the call of the National Society for the Study and Prevention of Tuberculosis to assist in mobilizing the resources of tuberculosis work in this State, we placed the institution at the disposal of the Council of Medical Defense, relying upon the National Government for aid in meeting the additional expense incident to increasing the capacity of the Sanatorium.

ERNEST COOPER,
Superintendent.

REPORT OF FIELD SECRETARY OF SOUTH CAROLINA SANATORIUM.

Appropriations.

Our work in the Legislature of 1917 shows the following results: Fifty thousand dollars (\$50,000) appropriated for the South Carolina Sanatorium (\$40,000 for the erection of an Infirmary with wards and a dining-room, \$10,000 for maintenance). Free beds endowed by the following counties: Anderson, Abbeville, Aiken, Beaufort, Charleston, Chester, Chesterfield, Clarendon, Georgetown, Kershaw, Orangeburg, Colleton, Sumter, Union and Williamsburg. Other endowments by cities, mills, etc.: Columbia, Charleston, Newberry, Laurens, Greenwood, Abbeville, Sumter, Darlington, Beaufort, Georgetown, Camden, Wateree Mills, Pacific Mills, Knights of Pythias, Southern Shops and the Manning Bible Class.

Special Course.

During the month of May I attended a class of instruction given by the National Association for the Prevention and Cure of Tuberculosis. This course has been of great benefit to me in many ways, putting me in touch with prominent "T. B. Specialists" from all parts of the country, and giving me an insight into the methods used in other States. As a result of this trip the entire work of the South Carolina Anti-Tuberculosis Association has been undertaken by the State Board of Health.

Organization of the Co-operating Committee on the Tuberculosis War Problem.

A suggestion for the organization of a Co-operating Committee on the Tuberculosis War Problem was made to this office by the

Illinois Council of Defense and was immediately undertaken by the State Board of Health. As Field Secretary of the South Carolina Sanatorium, I was appointed to do the work necessary for the organization of this important work. The plan proposed required the co-ordination of the State Board of Health, State Council of Defense, South Carolina Anti-Tuberculosis Association and the Red Cross. I was able through my connection with the State Board of Health, my membership in the Red Cross, my appointment on the Publicity Committee of the Council of Defense and my position as Executive Secretary of the South Carolina Anti-Tuberculosis Association, to obtain the hearty co-operation of these organizations. It will take some time to perfect this Committee so that it will exert a profound influence in every community in the State. Favorable comment and offers of co-operation have been made by prominent people throughout the State. Mr. W. W. Long, Clemson College, sent out a letter recommending that the county demonstration agents aid the Committee by dispensing literature in the rural communities. Mr. Swearingen, Superintendent of Education, suggested that a system of instruction on tuberculosis in the public schools of the State should be undertaken by the State Board of Health, the Legislature being asked to appropriate the necessary funds. Dr. Guy Snively, Director of the Southern Division of the Red Cross, requested that each chapter in South Carolina work in connection with the Co-operating Committee on tuberculosis. Mr. George A. Porter, Chief of the Section for Co-operation with the States in the National Council of Defense, was very favorably impressed by the plan and regards the preventive work as a very necessary feature in the program for State work.

Program.

I hereby submit a program which was presented to the Press Association at their annual meeting in June. Enthusiastic co-operation being given, and the offer of newspaper space rendered. This program has been approved by Dr. Jas. A. Hayne, and I trust will receive the hearty endorsement of the State Board of Health.

It is my desire to appear before the joint session of the Finance Committee and the Ways and Means Committee of the House, requesting that the necessary appropriation be made for the development of the South Carolina Sanatorium, and for a

general educational campaign to be conducted throughout the State during the coming year.

Proposition Made to the Surgeon General of the Army.

Upon the establishment of the cantonment in Columbia, I drew up a proposition to the Surgeon General of the army, which was suggested by the State Health Officer, and was approved by the State Board of Health. This plan suggests that a proper provision be made at the Sanatorium for the enlisted men suffering from incipient tuberculosis, and also, for those turned down in the draft for the same reason. I submit copy of the proposition. The contents deal mainly with Government and State support of said soldiers, and should the unit be established on the Sanatorium grounds, the men of fighting age of the State will be restored to health under the most advantageous condition and a great impetus will be given the general tuberculosis work of South Carolina.

Program for State Work, 1918.

Appropriations asked for in Legislature.

\$20,000—tax levy—1918.....	\$20,000
Completion of equipment, new buildings.....	2,000
Maintenance	20,000
Appropriation for War Fund to be expended by Co-operating Committee Tuberculosis War Problem.....	5,000
Educational Pamphlets, to be issued by State Board of Health to Public Schools.....	1,000
	<hr/>
	\$48,000

Cities Selected for Intensive Tuberculosis Work.

The following cities have been selected by the State Board of Health for a tuberculosis survey, to be conducted during the year 1918. The Chief Clerk of the Vital Statistics Bureau has furnished a list of all homes in said cities wherein a death has occurred within the last six months. When necessary, institutional care will be provided for residents of said homes, and an effort will be made to examine all children who are members of these families. Special educational work being made an important feature of the survey.

Cities: Anderson, Charleston, Columbia, Florence, Greenville, Greenwood, Orangeburg, Rock Hill, Spartanburg and Sumter.

Sanatorium.

It has been my duty to keep the beds filled with incipient tuberculosis cases. As we have not been able to accommodate any bed patients, numbers have been turned away. On the completion of the Infirmary, however, this great lack in our Hospital has been done away with, and we can now open our doors to the class of patients who most especially need the comfort and educational treatment which such an institution should furnish. Throughout the year the vacancies in the two wards have been filled almost immediately. The woman's waiting list having been far in excess of our present accommodations.

I have sent out a questionnaire to numbers of patients throughout the State, who have been discharged, and from their replies we hope to get some idea of the permanent results obtained from the treatment received at the Sanatorium.

REPORT OF DIRECTOR OF RURAL SANITATION.

*To the Chairman and Members of the Executive Committee,
South Carolina State Board of Health.*

Gentlemen: I herewith submit my report as your Director of Rural Sanitation for the year 1917.

The Department of Rural Sanitation is each year broadening its field of activities. No department of public health work has such wonderful opportunities of creating a public sentiment for better health conditions and no department has done more faithful work in helping to build up the State Health Department.

We are expecting to add three additional units to our department in 1918 and we are asking for an appropriation of \$14,500.00 for the expansion of our work.

Personnel.

Our force at present consists of four Units; the Executive Unit, composed of the Director and Miss E. W. Grieshaber, Stenographer; the Orangeburg County Unit, in charge of Dr. Vance W. Brabham; the Greenwood County Unit, in charge of Dr. F. M. Routh, and the Community Unit, in charge of Dr. Leroy H. Smith. Each of these men has a corps of field inspectors working under him.

The Executive Unit has charge of the office work and supervision over the field work and, in addition, assists the State Board of Health Officer. The State Director makes investigation of epidemics and the Stenographer does all the correspondence of the State Board of Health.

County Units.

Two County Units were instituted at the beginning of the year, when Orangeburg and Greenwood Counties, through their delegations in the Legislature, appropriated \$2,000.00 each to have work done in their respective counties for one year. An equal amount was given by the International Health Board and an equal amount was given from the State appropriation for this purpose. Too much praise can not be given these counties for taking the initiative in this work and too much praise can not be given Drs. Brabham and Routh for the excellent work they have done. On account of the shortage of labor and the advanced prices of supplies and materials, which we did not reckon on, the work has been considerably hampered. We have lost the majority of our best inspectors because they were offered double the money we were able to pay them, but we have made a splendid showing and have stimulated an interest in public health work in these counties which will grow greater and greater each year. We will continue our work in these counties next year and will extend the work, adding public health nurses who will do medical inspection of schools and will also do tuberculosis work in homes and schools. Through the sale of Red Cross Seals, which our department has charge of, we will be able to put on tuberculosis nurses who will look up the cases found in making our survey of the counties and will instruct the patients and members of their families what measures to take in order to prevent the spread of this disease. Our men worked many hours over time and have given their services gratis to this work in order to secure a nurse for their county, and in every school in the two counties we are working Tuberculosis Day was observed on December 7th and in every church on December 9th. The educational feature of this work would have been well worth while had we raised no funds for the work, but indications are that Orangeburg and Greenwood Counties will raise \$1,000.00 and at least \$10,000.00 will be raised in the State through the efforts of our Department for Tuberculosis work.

Community Unit.

Our Community Unit has done some good work in Richland County and will close the year in Chester County, where we are now working in the effort to help the people of that county secure health work for next year. We are selecting two or three communities to be used as a demonstration of the type of work the county units are doing. Greenwood and Orangeburg will appropriate \$3,600.00 each next year and will furnish us with an equipped office. Darlington County has already agreed to take up the work next year and we will have two or three other counties ready for work when we secure our next State appropriation.

Demonstration Work.

The exhibit for the State Fair, which was designed and executed by the Department of Rural Sanitation, was the best we have ever had and the State Health Officer pronounced it the best health exhibit he had ever seen anywhere. This exhibit was divided and sent to the Orangeburg and Greenwood County fairs and was also shown at many other county fairs in the State. Our plans are to have two exhibits for use in county and community fairs next year. We have not enough men to go with the exhibit and explain it to the people; but, with our public health nurses, we will be able to send somebody with each exhibit to as many fairs as possible next year. In the exhibit this year we stressed the value of sanitation for the prevention of typhoid fever and also had some splendid exhibits on the house fly, typhoid fever, tuberculosis and baby welfare.

Health Day was a feature of each fair in the counties where we are working and our floats in the parades attracted more attention than any other. At Orangeburg Dr. Brabham received first prize on his health float and at Greenwood Dr. Routh celebrated the night preceding Health Day at his fair with a public health demonstration, at which essays on health subjects were read by school children from all sections of the county, a gold medal being given to the successful contestant. Seven hundred people attended this contest.

For the past month we have had a corps of workers from the Children's Bureau, Department of Labor, working in co-operation with us in Orangeburg County. These workers wanted to select one county in South Carolina and selected one of the counties in which we had been working because they believed the

people in these counties had been prepared by us, in a way, for their coming and they are receiving splendid response in every school district which they have visited.

Our lectures, illustrated by lantern slides, are attracting crowds in every rural district and small town. We have purchased a moving picture film which will be shown in every town where there is a moving picture machine. The film deals with the problem of Rural Sanitation and will help bring results in those towns where it is shown.

Summary.

In order to make our report brief, we will not give a full report of work done by this Department, but our summary shows in part that the State Director, in addition to the investigation of epidemics, inspection of water supplies, office work, etc., has made fifty-nine lectures to audiences aggregating 4,070 people; our field directors and their assistants have examined 8,208 people for hookworm disease, given free treatment to 1,878, have given 72 illustrated lectures and 186 special lectures, instructing 27,539 people and have personally visited 8,915 homes.

L. A. RISER, M. D.,
Director of Rural Sanitation.

REPORT OF GREENVILLE COUNTY HEALTH OFFICER.

Greenville, S. C., December 8, 1917.

Dr. James A. Hayne, Secretary State Board of Health, Columbia, S. C.

Dear Sir: I herewith submit my annual report as health officer of Greenville County, S. C., for the year beginning December 1, 1916, to December 1, 1917.

Contagious and infectious diseases reported in the county during the year: Typhoid fever, 80; dysentery, 10; cerebro-spinal meningitis (epidemic), 3; infantile paralysis, 1; scarlet fever, 22; diphtheria, 16; smallpox, 20; chickenpox, 6; tuberculosis, 5; pneumonia, 18; whooping cough, 4; measles, 200.

These cases were quarantined and instructed how to prevent its spread in families and to neighbors. The number of cases of typhoid was decreased to some extent over last year, though not

as much as we would like to have had it. Had it not been in the carelessness in the nursing and handling of the patients this disease would have been much more reduced, inasmuch as there were six homes in which there were three cases in each, 4 homes with 4 cases in each, 5 homes with 2 cases in each, 10 cases contracted outside the county. Viewed in this light, it is easily seen that there were not so many points of infection of typhoid fever in the county. It is deplorable that after the extensive instruction given the people in this county last year during the Sanitary Survey of the county and the continued lectures given by the County Health Officer in schools and church, as to the care of the patients, so as to prevent its spread to others, that they are not cared for in a more intelligent manner, thereby preventing other members of the home from contracting the disease. However, the reduction of this disease has been from 240 cases in 1915 to 116 cases in 1916, to 80 cases in 1917 (reported); this alone is worth the health work being done in Greenville County, as the mortality in typhoid is 10 per cent., this means the saving of 28 human lives to the county of Greenville for the last 2 years.

Suppose that 10 of the 28 were adult males, earning capacity at the low estimate of \$1,000 annually, means a saving of \$10,000 annually, not to speak of the human side of the question, the physical suffering of the patient and the mental suffering of the family.

As regards measles. It is a staggering fact that the mothers will not be convinced that all of us are not doomed to have this disease, and keep their children from coming into contact with it, but many still deliberately place their children in contact with the disease, and others indifferently permit their children to come in contact with it so that they might have measles while young and be done with it.

Sanitation in the County.

The county is still going forward in installing sanitary privies. Visiting and inspecting 1,500 homes in the county, I have found 125 sanitary privies installed since last year's report. Most of the schools which had the funds have installed sanitary privies for boys and girls. Two large mill villages which were not sanitary last year, have installed the Kaustine Tank privy. This is to be preferred to the bucket system, as it is placed in the house, hence kept in a more sanitary condition. This leaves only one

small mill village in the county unsanitated (the McGee Mill), and it is to be hoped that they will get busy in the near future.

Just here will give copy of a mill president's letter to me in regard to sanitation at mill village:

September 17, 1917.

Dr. S. J. Taylor, Health Officer, Greenville, S. C.

Dear Dr. Taylor: I feel as if I would like to speak a word in regard to the work accomplished in this community under the suggestions and inspiration of Dr. Lumsden. At first the mill men of this vicinity seemed a little bit slow in appropriating Dr. Lumsden's ideas. I believe that without a single exception they all now agree that Dr. Lumsden did a very valuable piece of work.

So far as Judson Mill is concerned, we had last summer, as you know, a number of cases of typhoid fever. We have gone through this summer up to date without a single case. Our trained nurse, who has been with us for about two years, ascribes the splendid health of our people this summer to the sanitary work which was done under the direction of yourself and Dr. Lumsden.

Assuring you of my desire to co-operate with you in every way possible, I beg to remain with kind regards,

Very truly yours,

JUDSON MILLS,

(Signed) B. E. GEER, President and Treasurer.

Medical Examination of School Children.

Have examined 1,900 children, of this number 800 had enlarged tonsils, 400 diseased, 150 defective eye sight, 870 decayed teeth, 300 suffering from tooth ache, 200 had had dental attention, 1,200 used tooth brushes, 700 successfully vaccinated, 200 malposition of teeth, 20 malocclusion, 215 had pedicaclosis, 300 acute colds, 75 eczema, 12 discharging ears, 15 ringworm, 19 unpitigo, 163 nasal obstruction, 212 enlarged glands, 3 leaking heart, 247 mentally sluggish, 23 sore eyes. Where it was deemed necessary, the parents were advised by card to send their children to a physician or dentist. It is impossible to give the percentage treated, but many responded. Have given 16 lectures at schools and churches, estimated attendance 1,500.

Have vaccinated 1,793 children against smallpox, the percentage of takes was not as high as it should have been, due greatly to defective points. 400 were given prophylactic treatment for typhoid and para-typhoid, no bad results.

Have made sanitary inspections of all the mills of the county, County Home, convict camps, and had 12 consultations with doctors.

Three cases of meningitis were the first ever reported in the county, and they were traceable directly to the army camp, as was also the beginning of most of the measles this fall and winter.

Since the coming of the Red Cross to take charge of the 5 mile zone surrounding the camp, much of my time has been given to this work in analysis of the water from springs and wells in this zone, the most of them have been found polluted and posted.

The delegation this summer thought the health work of the county of sufficient importance to give me a sanitary inspector. His time is spent mostly in inspecting the territory just outside the city and mill villages, and he is doing an excellent work and the improvements in these districts is seen in less garbage in streets and yards, cleaner and more sanitary privies, the lids to seats remaining in their places and not destroyed as in the past. This should lessen our typhoid and dysentery in these districts.

Respectfully submitted,

S. J. TAYLOR,

Greenville County Health Officer.

REPORT OF CHEMIST AND BACTERIOLOGIST.

To the Chairman and Members of the Executive Committee of the State Board of Health.

Gentlemen: I have the honor to submit the following report of analysis of samples of water from the public water supplies of South Carolina, made under the direction of the State Board of Health, in accordance with the Laws of South Carolina relating to the Purity of the Water Supplies of Towns and Cities, 1 Code, Sec. 1599, and of information as to officials of Local Boards of Health and plants, source, capacity, treatment, daily consumption and consumption per capita, discharge of sewage and disposition of garbage.

Samples of water from forty-four cities and towns maintaining public water supplies were received for chemical and bacterial analysis. The analyses indicated that the waters were of good quality and free from contamination. In a few cases the samples first submitted showed either chemical or bacterial indications of contamination. In each of these cases a further investigation was made, and the final examination indicated that the causes of the contamination had been removed, or that the contamination was accidental or temporary.

Forty-four samples of water were received from miscellaneous sources for analysis, of which ten were found to be contaminated.

The following cities have noted improvements or additions to their plants during the past year:

Chester, installation of incinerator for garbage.

Dillon, duplicate pump system at river.

Easley, seven miles of sewer.

Gaffney, one mile of sewer.

Greer, use of spring one mile from city, capacity 50,000 gallons per day.

Lancaster, settling basin, 1,000,000 gallons capacity.

Laurens, one deep well.

Newberry, ordinance requiring certain central districts to connect with sewer by March 4th, 1918.

Yorkville, enlarged Raw Water basin.

Very respectfully,
FRANCIS L. PARKER, M. D.

RESULTS IN PARTS PER MILLION.

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as Ni- trates.	Nitrogen as Ni- trates.	Total Solids.	Bacterial Indica- tions of Con- tamination.	Chemical Indica- tions of Con- tamination.
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Water Supply of Abbeville, S. C.

Abbeville Water & Electric Plant. Owned by city. Superintendent, El. M. Anderson. In charge of collection of samples, E. M. Anderson. Chairman local Board of Health, Dr. C. H. McMurray.

Source: Creek, 1½ miles from city. Capacity, 250,000 gallons per day; filtered by mechanical filters. Treatment, ¼ grain Alum per gallon. Capacity of plant 500,000 per day. Average consumption, 200,000 gallons per day. Consumption per capita, 40 gallons per day. Service metered. Sixty per cent of residences using city water supply; 60 per cent of city sewered and have water closets. Sewage empties into creek. No garbage disposal plant. Garbage dumped in old fields and gullies.

March 2, 1917	5.00	0.01	0.01	0.00	0.00	100.00	Negative	Negative
June 6, 1917	4.00	0.01	0.01	0.05	0.00	85.00	Negative	Negative
September 27, 1917	6.00	0.01	0.02	0.00	0.00	85.00	Negative	Negative

Water Supply of Aiken, S. C.

City Water Works. Superintendent, H. Sudlow. In charge of collection of samples, J. L. McCarter. Chairman local Board of Health, I. W. Fowler.

Source: Collection of springs 6½ miles from city. Capacity, 2,000,000 gallons per day; not filtered. Capacity of plant, pump-
age, 1,500,000 gallons per day. Average consumption, 350,000 gallons per day. Consumption per capita, 80 gallons per
day. Service, 100 per cent. city using city water supply.

Sewerage system, 75 per cent. city sewered, 50 per cent. buildings connected with sewer and have water closets. Sand filter
beds. Sewage empties into small streams. No garbage disposal plant.

March 15, 1917	4.00	0.01	0.01	0.00	0.10	46.00	Negative	Negative
June 30, 1917	4.00	0.02	0.02	0.05	0.001	32.00	Negative	Negative
October 10, 1917	5.00	0.01	0.02	0.05	0.002	33.00	Negative	Negative

Water Supply of Allendale, S. C.

Commission of Public Works. Owned by the town. Superintendent, J. W. Mallard. In charge of collection of samples, J. W. Mallard. Chairman of local Board of Health, J. E. Wainock.
Source: Well near the center of town; not filtered. Capacity, 50,000 gallons per day. Capacity of plant, 50,000 gallons per day. Average consumption, 25,000 gallons per day. Consumption per capita, 42 gallons per day. Service metered, 60 per cent. of residences using city water supply; 60 per cent. of buildings connected with sewer and have closets. Septic tank and sprinkling filter. Sewage empties into Coosawhatchie River. No garbage disposal plant. Garbage dumped in open fields $1\frac{1}{2}$ miles from city and burned.

March 13, 1917	5.00	0.01	0.01	0.00	0.00	100.00	Negative
June 8, 1917	6.00	0.01	0.01	0.00	0.00	102.00	Negative
September 17, 1917	6.00	0.01	0.01	0.00	0.00	167.00	Negative

Water Supply of Anderson, S. C.

Southern Public Utilities Company. Manager, H. A. Orr. In charge of collection of samples, R. T. Long. Chairman local Board of Health, Dr. Frank Ashmore.
Source: Bailey's Creek, 2 miles from the city. Capacity, 4,000,000 gallons per day. Consumption, 600,000 gallons per day. Filtered by mechanical filter. Treatment $\frac{1}{4}$ grain Alum per gallon. Capacity of plant, 1,300,000 gallons per day. Consumption per capita, 100 gallons per day. Service metered. Ninety-three per cent. of buildings use city water supply. Sewerage system, 93 per cent. of city sewered. No sewage disposal plant. Sewage empties into Rack River and Jenistee Creek. Garbage dumped at incinerator and burned.

March 5, 1917	3.00—	0.01	0.01	0.00	0.00	48.00	Negative
May 31, 1917	4.00	0.01	0.01	0.05	0.00	50.00	Negative
September 17, 1917	4.00	0.01	0.01	0.01	0.00	52.00	Negative

Water Supply of Barnwell, S. C.

Barnwell Light & Water Works. Owned by the city. Superintendent, F. H. Miller. In charge of collection of samples, F. H. Miller. Chairman local Board of Health, Dr. J. G. Wooley.
Source: Two wells in city, 4½ and 6 inches in diameter, 151 feet deep. Capacity, 72,000 gallons per day. Not filtered. Capacity of plant, 72,000 gallons per day. Average consumption, 25,000 gallons per day. Consumption per capita, 30 gallons per day. Service, 50 per cent. metered; 50 per cent. buildings using city water supply. No sewerage system, 90 per cent. of buildings have water closets; 10 per cent. have septic tanks.

March 7, 1917	4.00	0.02	0.02	0.00	0.00	100.00	Negative
May 29, 1917	8.00	0.01	0.01	0.00	0.00	87.00	Negative
September 14, 1917	8.00	0.02	0.01	0.00	0.00	90.00	Negative

RESULTS IN PARTS PER MILLION (Continued).

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as Ni- trates.	Nitrogen as Ni- trates.	Total Solids.	Bacterial Indica- tions of Contam- ination.	Chemical Indica- tions of Contam- ination.
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Water Supply of Batesburg, S. C.

Batesburg Electric Light & Water Co. Owned by city. Superintendent, R. E. Hoover. In charge of collection of samples, S. B. Cartledge. Chairman local Board of Health, Dr. R. H. Timmerman.
Source: Well in city. Not filtered. Capacity, 36,000 gallons per day. Capacity of plant, 25,000 gallons per day; average consumption, 20,000 gallons per day. Consumption per capita, 2 gallons per day. Service metered, 10 per cent. building using city water supply; 10 per cent. septic tanks. No sewerage system. No garbage disposal plant. Garbage hauled outside city and burned.

May 5, 1917	5.00	0.02	0.02	0.00	0.00	110.00	Negative	Negative
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Water Supply of Beaufort, S. C.

Town of Beaufort, S. C. Water & Light Department. Superintendent Public Works, H. R. Pollitzer. In charge of collec-
tion of samples, H. R. Pollitzer. Chairman local Board of Health, Dr. C. M. Giffin.
Source: Well, 12 inches in diameter and 125 feet deep, in center of city. Not filtered. Average consumption, 50,000 gallons per day. Consumption per capita, 200 gallons per day. Service not metered, 30 per cent. buildings connected with city water supply. No sewerage system; 50 per cent. private sewers. Sewage empties into Salt Water River. No sewage disposal plant. Garbage dumped at edge of city limits and burned.

March 22, 1917	27.00	0.03	0.01	0.00	0.00	245.00	Negative	Negative
June 8, 1917	30.00	0.04	0.01	0.00	0.00	220.00	Negative	Negative
September 18, 1917	30.00	0.03	0.01	0.00	0.005	227.00	Negative	Negative

Water Supply of Bennettsville, S. C.

Bennettsville Electric & Water Plant. Owned by city. Manager, E. C. Morrison. In charge of collection of samples, E. C. Morrison and J. M. Easterling. Chairman local Board of Health. Source: Eight wells $4\frac{1}{2}$ inches in diameter, 60 feet deep, pumped. Average consumption, 220,000 gallons per day. Capacity of plant, 500,000 gallons per day. Consumption per capita, 60 gallons per day. Service metered, 90 per cent. buildings in the business and residence section, and 45 per cent. of buildings in corporate limits using city water supply. Sewerage system, 87 per cent. of buildings in the residence section and 45 per cent. buildings in entire corporate limits connected with sewer and have water closets. Septic tank. Sewage empties into Crooked Creek, $1\frac{1}{2}$ miles from city. Garbage disposal plant.

March 3, 1917	12.00	0.01	0.01	0.30	0.00	50.00	Negative
May 31, 1917	15.00	0.01	0.01	0.15	0.00	72.00	Negative
September 15, 1917	14.00	0.01	0.01	0.00	0.00	25.00	Negative

Water Supply of Camden, S. C.

Municipal Water & Light Plant. Superintendent, E. D. McCutchan. In charge of collection of samples, John W. Wilson and E. D. McCutchan. Chairman local Board of Health, W. G. Wilson. Source: Spring-fed creek, 1 mile from city limits. Capacity, 7,200,000 gallons per day; filtered by mechanical filters. Treatment, $1\frac{1}{4}$ grains Alum per gallon, 1.29 grains Soda Ash per gallon. Capacity of plant, 575,000 gallons per day. Service, 54 per cent. of buildings connected and using city water supply. Sewerage system, 81 per cent. of buildings connected with sewerage system and have water closets. Sewage empties into Wateree River. No garbage disposal plant. Garbage emptied on outskirts of town and partly burned.

March 16, 1917	5.00	0.02	0.02	0.00	0.00	50.00	Negative
May 31, 1917	4.00	0.01	0.01	0.05	0.00	45.00	Negative
October 5, 1917	5.00	0.01	0.01	0.00	0.00	43.00	Negative

Water Supply of Clinton, S. C.

Municipal Water & Light Plant. Superintendent, B. B. Mills. In charge of collection of samples, B. B. Mills. Chairman local Board of Health, Dr. T. L. W. Bailey. Source: Two wells 10 and 8 inches in diameter and 500 feet deep, in city. Capacity, 180,000 gallons per day; not filtered. Average consumption, 75,000 gallons per day. Consumption per capita, 25 gallons per day. Service metered, 80 per cent. of buildings using city water supply. Sewerage system: 75 per cent. of buildings connected with sewer and have water closets. Septic tanks. Sewage empties into two streams. No garbage disposal plant. Garbage dumped outside city limits.

March 9, 1917	7.00	0.01	0.01	0.07	0.00	190.00	Negative
May 30, 1917	9.00	0.01	0.01	0.25	0.00	185.00	Negative
September 20, 1917	8.00	0.01	0.01	0.20	0.00	212.00	Negative

RESULTS IN PARTS PER MILLION (Continued).

Sample Drawn.	Water Supply of Charleston, S. C.										
	Chlorine.	Free Ammonia.	Albuminoid Ammonia.	Nitrogen as Nitrates.	Nitrogen as Nitrites.	Total Solids.	Bacterial Indications of Contamination.	Chemical Indications of Contamination.			
<p>City Water Department, Commission of Public Works. Manager and Engineer, James E. Gibson. In charge of collection of samples, Dr. F. L. Parker. Chairman of the local Board of Health, J. A. Ball.</p> <p>Source: Goose Creek, 12 miles from the city. This is an impounded supply, the reservoir being an old tide water basin dammed off from tidal sea water. Area of flooded reservoir, 2,500 acres. Capacity of reservoir, 3,000,000 gallons, which would supply 10,000,000 gallons per day. Filtered by mechanical filter. Treatment, Sulphate of Alumina, Hydrate of Lime and Liquid Chlorine. Capacity of plant, 7,000,000 gallons per day. Average consumption, 6,500,000 gallons per day. Consumption per capita, 100 gallons per day. Service 70 per cent. metered.</p> <p>Sewerage system: Sewage empties into Charleston harbor. No garbage disposal plant. Garbage dumped in salt marshes outside of city limits.</p>											
March 17, 1917	34.00	0.02	0.02	0.00	0.00	156.00	Negative	Negative			
June 5, 1917	34.00	0.01	0.30	0.00	0.00	152.00	Negative	Negative			
September 20, 1917	23.00	0.01	0.03	0.00	0.00	146.00	Negative	Negative			

Water Supply of Chester, S. C.										
<p>Chester Water Works, owned by city. Superintendent, James Hamilton. In charge of collection of samples, James Hamilton. Chairman local Board of Health, Dr. S. W. Prior.</p> <p>Source: River 3 miles from city. Capacity, 7,200,000 gallons per day, filtered by mechanical filter. Treatment, 2 grains of Alum per gallon. Capacity of plant, 720,000 gallons per day. Average consumption, 300,000 gallons per day. Consumption per capita, 60 gallons per day. Service metered, 85 per cent. of buildings using city water supply.</p> <p>Sewerage system: 85 per cent. of city sewer and have water closets. No sewage disposal plant. Sewage empties into Tan Yard Branch. Incinerator installed for disposal of garbage.</p>										
March 7, 1917	5.00	0.01	0.01	0.00	0.00	105.00	Negative	Negative		
June 6, 1917	5.00	0.01	0.01	0.00	0.00	110.00	Negative	Negative		
September 17, 1917	5.00	0.01	0.01	0.00	0.00	135.00	Negative	Negative		

Water Supply of Columbia, S. C.

Water Department, City of Columbia, S. C. Owned by city. Superintendent, F. C. Wyse. In charge of collection of samples, G. H. White, Chairman local Board of Health, Dr. S. B. Fishburne. Capacity practically unlimited. Filtered by a mechanical filter. Capacity of plant, 13,000 gallons per day. Treatment, 1.5 grain Alum per gallon. Average consumption, 5,000,000 gallons per day. Consumption per capita, 150 gallons per day. Service metered, 99½ per cent. of buildings using city water supply. Sewerage system: 80 per cent. of buildings connected with city sewer and have water closets. Sewage empties into Congaree River. No garbage disposal plant. Garbage is dumped in out-of-the-way places of city and covered with earth.

March 6, 1917	4.00	0.01	0.01	0.00	0.00	80.00	Negative
May 30, 1917	4.00	0.01	0.01	0.00	0.00	64.00	Negative
September 29, 1917	5.00	0.01	0.01	0.00	0.00	63.00	Negative

Water Supply of Darlington, S. C.

Carolina Gas & Electric Co. Superintendent, C. L. Romydy. In charge of collection of samples, C. L. Romydy. Chairman of local Board of Health, Dr. J. T. Coggs hall. Capacity, 288,000 gallons per day. Filtered by a mechanical filter. Source: Well, diameter 8 inches, depth 385 feet, in city. Capacity, 288,000 gallons per day. Filtered by a mechanical filter. Treatment, 0.4 grain Soda Ash per gallon, 0.2 grain per gallon of Alum. Capacity of plant, 225,000 gallons per day. Average consumption, 125,000 gallons per day. Consumption per capita, 35 gallons per day. Service metered, 75 per cent. of buildings using city water supply.

Sewerage system: Almost all of town is sewerred, 50 per cent. of buildings connected with sewer and have water closets.

March 6, 1917	4.000	0.01	0.01	0.00	0.00	75.00	Negative
May 28, 1917	4.00	0.01	0.01	0.00	0.00	40.00	Negative
September 13, 1917	4.00	0.01	0.01	0.00	0.00	65.00	Negative

Water Supply of Dillon, S. C.

Dillon Water Works Plant. Owned by city. Secretary and Treasurer, B. A. Bedenbaugh. In charge of collection of samples, M. D. Davis. Chairman of local Board of Health, Dr. J. A. Hamer. Capacity, 288,000 gallons per day. Filtered by a mechanical filter. Source: About 2 miles from city, river. Capacity, 288,000 gallons per day. Filtered by a mechanical filter. A duplicate pumping system has been installed at river. Treatment, Soda, Ash and Alum. Capacity of plant, 130,000 gallons per day. Average consumption 20,000 gallons per day. Consumption per capita, 30 gallons per day. Service metered, 50 per cent. of buildings using city water supply; 75 per cent. of city connected with sewerage system; 50 per cent. of buildings have water closets. Septic tank. Sewage empties into Pee Dee River. No garbage disposal plant. Garbage dumped in low and suitable places.

March 10, 1917	7.00	0.01	0.01	0.00	0.00	115.00	Negative
June 5, 1917	8.00	0.01	0.01	0.00	0.00	73.00	Negative
September 9, 1917	7.00	0.02	0.02	0.00	0.00	82.00	Negative

RESULTS IN PARTS PER MILLION (Continued).

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as Ni- trates.	Nitrogen as Ni- trates.	Total Solids.	Bacterial Indica- tions of Con- tamination.	Chemical Indica- tions of Con- tamination.
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Water Supply of Easley, S. C.

City Water & Light Plant. Owned by city. Superintendent, C. D. Bolt. In charge of collection of samples, C. D. Bolt. Chair-
man local Board of Health, T. B. Higgins.
Source: Wells and branch. Wells, diameter 2 inches, depth 40 feet, pumped. Distance from city, three-quarters of a mile.
Capacity, 150,000 gallons per day. Branch water filtered by mechanical filter. Treatment, Lime and Alum. Average con-
sumption, 50,000 gallons per day. Consumption per capita, 15 gallons per day. Service metered, 75 per cent. of build-
ings use city water supply. No sewerage system. No garbage disposal plant. Garbage dumped into large ditch.

March 5, 1917	4.00	0.01	0.01	0.00	0.00	55.00	Negative	Negative
September 9, 1917	4.00	0.01	0.01	0.00	0.00	55.00	Negative	Negative

Water Supply of Florence, S. C.

City of Florence Water Department. Owned by city. Superintendent, M'Kean Maffitt. In charge of collection of samples,
M'Kean Maffitt. Chairman local Board of Health, Dr. F. K. Rhodes.
Source: Well, 12-10-8-inch casing, 6-inch discharge, 650 feet deep; pump, air, in center of city hall. Capacity, 600,000 gallons
per day; not filtered. Average consumption, 550,000 gallons per day. Consumption per capita, 91 gallons per day.
Service metered, 50 per cent. of buildings using city water supply.
Sewerage system: 60 per cent. of city sewerage; 40 per cent. connections and water closets. Sewage disposal plant. Sewage
empties into Jeffries Creek. Garbage disposal plant, Nye odorless incinerator, 10-ton capacity, located on outskirts of
city.

March 23, 1917	56.00	0.02	0.01	0.00	0.00	266.00	Negative	Negative
June 9, 1917	53.00	0.02	0.01	0.00	0.01	279.00	Negative	Negative
September 12, 1917	50.00	0.01	0.01	0.30	0.00	311.00	Positive	Negative

Water Supply of Gaffney, S. C.

In charge of the Board of Public Works. Owned by city. Superintendent, L. V. Gaffney. In charge of collection of samples, L. V. Gaffney. Chairman of local Board of Health, D. G. Byers.
 Source: Creek, $3\frac{1}{4}$ miles from city; filtered by gravity filter. Treatment, 1 grain Alum per gallon. Capacity of plant, 1,000,000 gallons per day. Average consumption, 100,000 gallons per day. Consumption per capita, 20 gallons per day. Service metered; 12 per cent. of buildings using city water supply.
 Sewerage system: 8 per cent. of buildings connected with sewer and have water closets. Sewage disposal plant. Sewage empties into branch. Garbage disposal plant.

March 10, 1917	4.00	0.01	0.01	0.07	0.00	128.00	Negative
June 2, 1917	4.00	0.02	0.01	0.00	0.00	105.00	Negative
September 24, 1917	4.00	0.01	0.01	0.01	0.00	100.00	Negative

Water Supply of Georgetown, S. C.

Black River Water Company, R. J. Clifford, President. In charge of collection of samples, Dr. H. L. Wright. Chairman local Board of Health, Dr. W. W. Gaillard.
 Source: Black River, 75 miles from city by river, 15 miles by air line. Capacity, 1,000,000 gallons per day. Filtered by slow sand filter. No treatment. Capacity of plant, 1,000,000 gallons per day. Average consumption, 177,000 gallons per day. Consumption per capita, 75 gallons per day. Service metered.
 Sewerage system: 60 per cent. of city sewered. Sewage empties into Sampit River. No garbage disposal plant. Garbage dumped in low places on abandoned rice fields.

March 6, 1917	8.00	0.01	0.02	0.00	0.00	80.00	Negative
May 30, 1917	7.00	0.01	0.04	0.00	0.00	70.00	Negative
September 17, 1917	7.00	0.01	0.07	0.00	0.00	50.00	Negative

Water Supply of Graniteville, S. C.

Graniteville Manufacturing Company. Superintendent, E. W. McCue. In charge of collection of samples, E. F. Delvin.
 Source: Spring, 1 mile from town. Not filtered. Capacity, 40,000 gallons per day. Average consumption, 22,000 gallons per day. Consumption per capita, 20 gallons per day. Service not metered; 2 per cent. of buildings using city water supply.
 Sewerage system: 10 per cent. city sewered; 2 per cent. of buildings connected with city sewer. Sewage empties into Horse Creek. No garbage disposal plant. Garbage dumped outside of town limits.

March 6, 1917	3.00	0.01	0.01	0.00	0.00	55.00	Negative
June 2, 1917	3.00	0.01	0.01	0.05	0.00	33.00	Negative
September 17, 1917	3.00	0.01	0.02	0.00	0.00	25.00	Negative

RESULTS IN PARTS PER MILLION (Continued).

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Ammonia.	Nitrogen as Nitrate.	Nitrogen as Nitrite.	Total Solids.	Bacterial Indications of Contamination.	Chemical Indications of Contamination.
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Water Supply of Greenwood, S. C.

Greenwood Water & Electric Plant. Owned by the city. Superintendent, A. J. Sproles. In charge of collection of samples, A. J. Sproles. Chairman local Board of Health, Dr. W. P. Turner.
 Source: Eight wells, diameter 8 inches, 300 feet deep, $1\frac{1}{2}$ miles from city. Capacity, 1,440,000 gallons per day; not filtered. Average consumption, 350,000 gallons per day. Consumption per capita, 40 gallons per day. Service metered; 75 per cent. of buildings using city water supply.
 Sewerage system: 60 per cent. of city sewered. Treatment, septic tank. Sewage empties from septic tank on to sand and gravel. No garbage disposal plant. Garbage dumped on vacant lots.

March 3, 1917	6.00	0.01	0.01	0.00	0.00	193.00	Negative	Negative
June 16, 1917	6.00	0.08	0.20	0.00	0.01	180.00	Negative	Negative
September 17, 1917	6.00	0.01	0.01	0.01	0.00	218.00	Negative	Negative

Water Supply of Greenville, S. C.

The Paris Mountain Water Co. Superintendent, H. W. Perry. In charge of collection of samples, H. W. Perry. Chairman of local Board of Health, Dr. Davis Furman.
 Source: Streams in Paris Mountain to reservoirs, 8 and 12 miles from city; gravity system. Capacity, 5,000,000 gallons per day; not filtered. Average consumption, 1,250,000 gallons per day. Consumption per capita, 40 gallons per day. Service metered; 98 per cent. of buildings using city water supply.
 Sewerage system: 75 per cent. of city sewered and have water closets. Sewage empties into Reedy River. Garbage disposal plant. Garbage dumped at crematory and burned.

March 3, 1917	3.00	0.01	0.01	0.00	0.00	55.00	Negative	Negative
June 2, 1917	3.00	0.01	0.01	0.00	0.00	40.00	Negative	Negative
September 14, 1917	4.00	0.01	0.01	0.00	0.00	55.00	Negative	Negative

Water Supply of Hartsville, S. C.

In charge of the Commission of Public Works. Owned by the city. Superintendent, J. A. Tyner. In charge of collection of samples, J. A. Tyner. Chairman of local Board of Health, Maj. J. L. Coker.
Source: Well 12 miles from the city, 3½ inches in diameter, 287 feet deep; pumped. Capacity, 237,000 gallons per day; not filtered. Capacity of plant, 237,600 gallons per day. Average consumption, 175,000 gallons per day. Consumption per capita, 60 gallons per day. Service metered.
Sewerage system: 65 per cent. of city sewerred. Sewage empties into Black Creek. Garbage disposal plant. Garbage burned.

March 3, 1917	4.00	0.01	0.01	0.00	0.00	40.00	Negative
June 11, 1917	4.00	0.01	0.01	0.00	0.00	60.00	Negative
September 13, 1917	4.00	0.02	0.01	0.00	0.00	25.00	Negative

Water Supply of Greer, S. C.

Commission of Public Works. Owned by city. Superintendent, C. C. McGowan. In charge of collection of samples, C. C. McGowan. Chairman local Board of Health, Dr. S. E. Holtzclaw.
Source: Four wells, in city. Capacity, 230,000 gallons per day; not filtered. Average consumption, 100,000 gallons per day. Service metered, 32 per cent. of buildings using city water supply.
Sewerage system: 30 per cent. of buildings connected with sewerage system and have water closets. Sewage empties into branches. No garbage disposal plant. Garbage dumped in fields outside city limits.

April 8, 1917	4.00	0.01	0.01	0.00	0.00	113.00	Negative
October 19, 1917	6.00	0.01	0.01	0.01	0.00	38.00	Negative

Water Supply of Kingstree, S. C.

Kingstree Water Works. Owned by city. Superintendent, S. C. Anderson. In charge of collection of samples, S. C. Anderson. Chairman local Board of Health, T. McCutchen.
Source: Well half mile from city, 3½ inches in diameter, 287 feet deep; pumped. Capacity, 237,600 gallons per day; not filtered. Capacity of plant, 237,600 gallons per day. Average consumption 175,000 gallons per day. Consumption per capita, 60 gallons per day. Service metered, 40 per cent. of buildings using city water supply.
Sewerage system: 80 per cent. of city sewerred; 40 per cent. of buildings connected with sewage and have water closets. Sewage disposal plant; sewage treated with kerosene and salt. Sewage empties into Black Creek. No garbage disposal plant. Garbage dumped outside city and burned.

March 19, 1917	6.00	0.01	0.01	0.01	0.00	275.00	Negative
June 5, 1917	6.00	0.01	0.01	0.20	0.00	303.00	Negative
September 18, 1917	6.00	0.02	0.01	0.00	0.00	250.00	Negative

RESULTS IN PARTS PER MILLION.

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as Ni- trates.	Nitrogen as Ni- trates.	Total Solids.	Bacterial Indica- tions of Contam- ination.	Chemical Indica- tions of Contam- ination.
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Water Supply of Lancaster, S. C.

In charge of Commission of Public Works. Owned by city. R. S. Harper, Superintendent. In charge of selection of samples, E. C. Secrest. Chairman local Board of Health, W. R. Thompson.
Source: Two creeks 1½ miles from the city. Capacity, 1,000,000 gallons per day; filtered by mechanical filter. Treatment, 1 grain Alum per gallon. Capacity of plant, 720,000 gallons per day. Average consumption, 300,000 gallons per day.
Sewerage system: 70 per cent. of city sewered and have water closets. Service metered: 75 per cent. of buildings using city water supply. Consumption per capita, 20 gallons per day. Sewage empties into Little River. No garbage disposal plant. Garbage dumped outside city limits and treated with lime when necessary.

March 5, 1917	10.00	0.01	0.01	0.00	0.00	85.00	Negative	Negative
May 30, 1917	12.00	0.01	0.01	0.00	0.00	133.00	Negative	Negative
September 14, 1917	9.00	0.01	0.01	0.00	0.00	85.00	Negative	Negative

Water Supply of Laurens, S. C.

Municipal Light & Water Plant. Superintendent, Perry E. Lee. In charge of collection of samples, Perry E. Lee. Chairman local Board of Health, Dr. R. E. Hughes.
Source: Wells and creek, within city limits; filtered with mechanical filter. Treatment, 1 grain Alum per gallon. Capacity of plant, 250,000 gallons per day. Average consumption, 250,000 gallons per day. Consumption per capita, 25 gallons per day. Service metered, 90 per cent. of buildings using city water supply.
Sewerage system: 75 per cent. of buildings connected with sewer and have water closets. Sewage empties into Little River. No garbage disposal plant. Garbage dumped outside city limits and treated with lime when necessary.

March 21, 1917	4.00	0.01	0.01	0.00	0.00	105.00	Negative	Negative
June 2, 1917	8.00	0.01	0.01	0.20	0.00	155.00	Negative	Negative
September 24, 1917	8.00	0.01	0.01	0.10	0.00	130.00	Negative	Negative

Water Supply of Manning, S. C.

Manning Water Works. Owned by the city. Superintendent, F. P. Ervin. In charge of collection of samples, F. P. Ervin. Source: Well 6 inches in diameter and 485 feet deep. Capacity, 86,400 gallons per day. Not filtered. Total capacity of plant, 431,400 gallons per day. Average consumption, 24,000 gallons per day. Service metered, 60 per cent. of buildings using city water supply.

Sewerage system: 75 per cent. of city sewered, 15 per cent. water closets. Sewage empties into Black River Swamp. No garbage disposal plant.

March 14, 1917	6.00	0.03	0.01	0.00	0.00	170.00	Negative
June 5, 1917	5.00	0.02	0.01	0.10	0.00	204.00	Negative
October 10, 1917	6.00	0.01	0.01	0.03	0.00	158.00	Negative

Water Supply of McColl, S. C.

City of McColl Water Works. Superintendent, J. H. Dougherty. In charge of collection of samples, L. M. Morrison. Chairman of local Board of Health, Dr. D. Hamer.

Source: Two wells 6 inches in diameter and 100 feet deep, pumped, within city. Capacity, 144,000 gallons per day; not filtered. Capacity of plant, 144,000 gallons per day. Average consumption, 80,000 gallons per day. Consumption per capita, 23 gallons per day. Service metered, 90 per cent. of buildings use city water supply.

Sewerage system: Entire city sewered; 50 per cent. of buildings have closets. Sewage empties into Planter Creek. Sewage disposal plant. No garbage disposal plant. Garbage dumped outside city limits.

March 14, 1917	5.00	0.01	0.01	0.20	0.00	65.00	Negative
May 30, 1917	5.00	0.01	0.01	0.25	0.00	45.00	Negative
September 15, 1917	5.00	0.02	0.02	0.00	0.00	43.00	Negative

Water Supply of Marion, S. C.

Carolina Gas & Electric Co. General Superintendent, P. A. Tillery. Raleigh, N. C. In charge of collection of samples, D. Thomlinson. Local Superintendent, Chairman local Board of Health, Dr. E. M. Dibble.

Source: Wells, diameter 8 and 10 inches, depth 100 and 150 feet, in city. Capacity, 150,000 gallons per day; not filtered. Capacity of plant, 150,000 gallons per day. Average consumption, 75,000 gallons per day. Consumption per capita, 15 gallons per day. Service metered, about 50 per cent. of buildings using city water supply.

Sewerage system: Entire city sewered; 40 per cent. of buildings connected with sewer and have water closets. Septic tank. Sewage empties into Catfish Creek. Garbage dumped on "Dump Grounds" outside city and set on fire. No garbage disposal plant.

March 3, 1917	6.00	0.01	0.02	0.00	0.03	155.00	Negative
May 30, 1917	7.00	0.02	0.02	0.05	0.25	190.00	Negative
September 14, 1917	7.00	0.01	0.02	0.00	0.00	207.00	Negative

RESULTS IN PARTS PER MILLION (Continued).

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as NI- trates.	Nitrogen as NI- trites.	Total Solids.	Bacterial Indica- tions of Con- tamination.	Chemical Indica- tions of Con- tamination.
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Water Supply of Newberry, S. C.

In charge of Commission of Public Works. Owned by city. Superintendent, H. W. Schumpert. In charge of collection of samples, Dr. F. K. Gilder. Chairman of local Board of Health, Dr. F. K. Gilder.
 Source: Wells 2 and 8 inches in diameter, 300 and 325 feet deep; pumped by air, in city limits. Capacity, 300,000 gallons per day; not filtered. Average consumption, 140,000 gallons per day. Consumption per capita, 23 gallons per day.
 Service metered; 95 per cent. of buildings using city water supply.
 Sewerage system: 75 per cent. connected with sewer. No connections in tenement houses in cotton mill districts. Using a system of "Pot. Dry Closets." Sewage disposal plant. Septic tank and filter. Sewage empties into Scott's Creek. Incinerator is installed for disposal of garbage.

March 13, 1917	27.00	0.01	0.01	0.50	0.00	335.00	Negative	Negative
May 23, 1917	29.00	0.01	0.01	0.25	0.00	304.00	Negative	Negative
September 13, 1917	27.00	0.01	0.01	0.10	0.00	287.00	Negative	Negative

Water Supply of North Augusta, S. C.

North Augusta Works. Owned by corporation. Superintendent, W. W. Moore. In charge of collection of samples, W. E. Mealing. Chairman of local Board of Health, W. E. Mealing.
 Source: Lake in city. Not filtered. Treatment, 1.50 pounds Hypochlorite of Lime to 1,500,000 gallons. Capacity, 400,000 gallons per day. Capacity of plant, 330,000 gallons per day. Average consumption, 250,000 gallons per day. Service metered.
 Sewerage system: 20 per cent. of city sewered. Sewage empties into Savannah River. No garbage disposal plant. Garbage dumped outside of town.

March 3, 1917	5.00	0.01	0.01	0.00	0.00	38.00	Negative	Negative
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Water Supply of Orangeburg, S. C.

Orangeburg Water & Light Plant. Owned by city. Superintendent, J. R. Fizer. In charge of collection of samples, J. R. Fizer. Chairman local Board of Health, Dr. C. I. Green.
Source: Wells, 5 and 8 inches in diameter, 200 feet deep, pumped and flowing in city. Capacity, 1,000,000 gallons per day; not filtered. Capacity of plant, 700,000 gallons per day. Average consumption, 230,000 gallons per day. Consumption per capita, 33 gallons per day. Service, 60 per cent. metered.
Sewerage system: 50 per cent. of buildings connected with sewerage system and have water closets. Sewage empties into Edisto River. Garbage dumped at incinerator and burned.

March 10, 1917	8.00	0.02	0.01	0.00	0.00	180.00	Negative
June 12, 1917	7.00	0.03	0.03	0.00	0.00	190.00	Negative
September 29, 1917	7.00	0.02	0.01	0.00	0.00	189.00	Negative

Water Supply of Rock Hill, S. C.

Water & Electric Department, city of Rock Hill. Manager, J. G. Barnwell. In charge of collection of samples, S. T. Frew. Chairman of local Board of Health, Dr. J. R. Miller.
Source: Catawba River, 6 miles from city. Filtered by mechanical filter. Treatment, $\frac{1}{2}$ grain of Alum per gallon, $\frac{1}{4}$ grain Lime per gallon, 0.05 grains Hypochlorite of Lime per gallon. Capacity of plant, 1,000,000 gallons per day. Average consumption, 275,000 gallons per day. Consumption per capita, 37 gallons per day. Service metered, 50 per cent. of buildings using city water supply.
Sewerage system: 25 per cent. of buildings connected with sewerage system and have water closets. Sewage empties into Catawba River. Sewage disposal plant. Garbage dumped on city farm.

March 21, 1917	4.00	0.01	0.01	0.00	0.00	55.00	Negative
June 2, 1917	3.00	0.01	0.01	0.50	0.00	56.00	Negative
September 21, 1917	5.00	0.01	0.01	0.10	0.00	35.00	Negative

Water Supply of Spartanburg, S. C.

Spartanburg Water Works. Owned by city. Superintendent, M. M. Boyd. In charge of collection of samples, J. O. Erwin, Jr. Chairman local Board of Health, Dr. J. W. Allen.
Source: Chinoquepin Creek and Sholly Creek, $\frac{1}{4}$ mile from city. Capacity, 5,000,000 gallons per day; filtered by mechanical filters. Treatment, 0.6 grain Alum per gallon. Average consumption, 1,250,000 gallons per day. Consumption per capita, 60 gallons per day. Service, 65 per cent. of buildings using city water supply.
Sewerage system: 55 per cent. of buildings connected with sewer and have water closets. Sewage empties into Lawson's Fork Creek and Pair Forest Creek, $\frac{1}{4}$ mile from city limits. Garbage disposal plant, garbage burned. Garbage dumped on outskirts of city.

March 15, 1917	3.00	0.01	0.01	0.00	0.00	43.00	Negative
May 30, 1917	5.00	0.01	0.01	0.00	0.00	64.00	Negative
September 24, 1917	5.00	0.01	0.01	0.01	0.00	40.00	Negative

RESULTS IN PARTS PER MILLION (Continued).

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Ammonia.	Nitrogen as Nitrates.	Nitrogen as Nitrates.	Total Solids.	Bacterial Indications of Contamination.	Chemical Indications of Contamination.
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Water Supply of Sumter, S. C.

City Water Works. Owned by city. Superintendent, W. W. McKagan. In charge of collection of samples, W. W. McKagan. Chairman of Local Board of Health, J. M. McKeiver.
 Source: 15 wells, 6 inches in diameter, 50 to 430 feet deep, pumped; 1 mile from city. Capacity, 1,800,000 gallons per day; not filtered. Capacity of plant, electric, 120,000 gallons per day. Consumption per capita, 35 gallons per day. Service, 75 per cent. metered; 75 per cent. of buildings connected with city water supply.
 Sewerage system: 75 per cent. buildings connected with sewer and have water closets. Sewage empties into Turkey Creek and Green Swamp. Septic tanks. No garbage disposal plant. Garbage dumped on lot outside city limits.

March 15, 1917	8.00	0.02	0.01	0.50	0.00	38.00	Negative	Negative
June 2, 1917	5.00	0.01	0.01	0.02	0.00	85.00	Negative	Negative
September 14, 1917	10.00	0.01	0.02	0.00	0.01	47.00	Negative	Negative

Water Supply of Timmons ville, S. C.

Board of Public Works. Superintendent, J. E. Patterson. In charge of collection of samples, J. E. Patterson. Chairman of Local Board of Health, Dr. C. A. Foster.
 Source: Well 8 inches in diameter, 526 feet deep, on outer edge of town. Capacity, 300,000 gallons per day. Average consumption, 20,000 gallons per day. Consumption per capita, 20 gallons per day. Service metered, 80 per cent. of buildings using city water supply.
 Sewerage system: 60 per cent. of buildings connected with sewer and have water closets. Septic tank. Sewage empties into Sparrow Swamp. No garbage disposal plant. Garbage burnt and dumped into swamp.

March 10, 1917	4.00	0.02	0.02	0.00	0.00	95.00	Negative	Negative
June 2, 1917	5.00	0.01	0.01	0.30	0.00	270.00	Negative	Negative
September 17, 1917	6.00	0.01	0.01	0.10	0.00	88.00	Negative	Negative

Water Supply of Union, S. C.

Municipal Electric Light & Water Works. Owned by town. Superintendent, R. A. Easterling. Chairman local Board of Health, S. G. Sarraff. In charge of collection of samples, R. A. Easterling.
 Source: Creek 2 miles from city. Capacity, 15,000,000 gallons per day. Filtered by mechanical filter. Treatment, Alum. Capacity of plant, 500,000 gallons per day. Average consumption, 400,000 gallons per day. Consumption per capita, 35 gallons per day. Service metered, 80 per cent. of buildings using city water supply.
 Sewerage system: 75 per cent. of city sewerd and have water closets. Sewage empties into Buffalo Creek. No garbage disposal plant. Garbage dumped outside city limits.

March 5, 1917	4.00	0.01	0.01	0.00	0.00	55.00	Negative
June 2, 1917	5.00	0.01	0.02	0.05	0.00	78.00	Negative
September 13, 1917	5.00	0.01	0.01	0.05	0.00	63.00	Negative

Water Supply of Winnsboro, S. C.

Board of Public Works. Owned by town. Superintendent, T. R. Ellison. In charge of collection of samples, T. R. Ellison. Chairman local Board of Health, Dr. J. E. Douglas.
 Source: Creek 2 miles from city; filtered. Capacity, 1,000,000 gallons per day. Treatment, Alum. Average consumption, 75,000 gallons per day. Consumption per capita, 40 gallons per day. Service metered; 75 per cent. of buildings using city water supply.
 Sewerage system: 85 per cent. of city sewerd; 75 per cent. of buildings connected with sewer. Sewage empties into Catholic's Branch, $\frac{3}{4}$ mile from city. Septic tank. No garbage disposal plant. Garbage dumped in low waste places.

March 31, 1917	8.00	0.01	0.01	0.05	0.00	130.00	Negative
August 14, 1917	9.00	0.03	0.01	0.01	0.00	100.00	Negative

Water Supply of York, S. C.

Yorkville Water Plant. Owned by city. Superintendent, J. O. Wray. In charge of collection of samples, J. O. Wray. Chairman local Board of Health, Dr. M. T. Walker.
 Source: Branch, $\frac{3}{4}$ mile from city. Capacity, 800,000 gallons per day; filtered by mechanical filter. Treatment, $\frac{1}{2}$ grain Alum per gallon. Capacity of plant, 500,000 gallons per day. Average consumption, 200,000 gallons per day. Consumption per capita, 35 gallons per day. Service metered, 70 per cent. of buildings connected with city water supply.
 Sewerage system: 50 per cent. of buildings connected with sewerage system and have water closets. Sewage empties into Fishing Creek on east and Turkey Creek on the west. No garbage disposal plant. Garbage dumped on worn out land outside city limits.

March 15, 1917	5.00	0.01	0.01	0.30	0.00	75.00	Negative
June 13, 1917	6.00	0.01	0.01	0.05	0.00	92.00	Negative
September 17, 1917	6.00	0.01	0.01	0.10	0.00	105.00	Negative

ANALYSIS OF LAST QUARTERLY INSPECTION OF WATER
-FOR STATE BOARD OF HEALTH

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as Ni- trates.	Nitrogen as Ni- trates.	Total Solids.	Bacterial Indica- tions of Con- tamination.	Chemical Indica- tions of Con- tamination.
Abbeville, S. C.								
December 7, 1917	3.00	0.02	0.05	0.00	0.00	42.00	Negative	Negative
Aiken, S. C.								
December 15, 1917	9.00	0.04	0.03	0.00	0.00	50.00	Negative	Negative
Anderson, S. C.								
December 2, 1917	2.00	0.01	0.02	0.10	0.00	51.00	Negative	Negative
Allendale, S. C.								
December 13, 1917	3.00	0.01	0.02	0.00	0.00	114.00	Negative	Negative
Barnwell, S. C.								
December 7, 1917	3.00	0.02	0.04	0.00	0.00	80.00	Negative	Negative
Batesburg, S. C.								
December 15, 1917	7.00	0.01	0.02	0.00	0.00	92.00	Negative	Negative

Beaufort, S. C.							
December 10, 1917	28.00	0.02	0.02	0.00	0.00	190.00	Negative
Bennettsville, S. C.							
December 18, 1917	16.00	0.01	0.03	0.00	0.00	53.00	Negative
Camden, S. C.							
December 12, 1917	2.00	0.01	0.03	0.00	0.00	40.00	Negative
Charleston, S. C.							
December 17, 1917	35.00	0.03	0.06	0.00	0.00	139.00	Negative
Chester, S. C.							
December 10, 1917	5.00	0.01	0.03	0.00	0.00	70.00	Negative
Clinton, S. C.							
January 1, 1918	14.00	0.01	0.03	0.15	0.00	195.00	Negative
Columbia, S. C.							
December 14, 1917	8.00	0.02	0.03	0.00	0.00	25.00	Negative
Darlington, S. C.							
December 3, 1917	6.00	0.01	0.01	0.00	0.00	74.00	Negative
December 3, 1917	6.00	0.01	0.01	0.00	0.00	73.00	Negative
Dillon, S. C.							
December 2, 1917	3.00	0.01	0.04	0.00	0.00	44.00	Negative

ANALYSIS OF LAST QUARTERLY INSPECTION OF WATER FOR STATE BOARD OF HEALTH.

Sample Drawn.

	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as Ni- trates.	Nitrogen as Ni- trates.	Total Solids.	Bacterial Indica- tions of Contam- ination.	Chemical Indica- tions of Contam- ination.
Esley, S. C.								
January 1, 1918	5.00	0.02	0.03	0.10	0.00	25.00	Negative	Negative
Florence, S. C.								
December 10, 1917	58.00	0.03	0.03	0.00	0.00	255.00	Negative	Negative
Gaffney, S. C.								
December 11, 1917	3.00	0.01	0.02	0.00	0.00	65.00	Negative	Negative
Georgetown, S. C.								
December 18, 1917	12.00	0.01	0.06	0.00	0.00	115.00	Negative	Negative
Graniteville, S. C.								
December 20, 1917	7.00	0.01	0.02	0.00	0.00	25.00	Negative	Negative
Greenwood, S. C.								
December 28, 1917	5.00	0.03	0.03	0.00	0.00	172.00	Negative	Negative
Greenville, S. C.								
December 20, 1917	6.00	0.01	0.02	0.00	0.00	60.00	Negative	Negative

Hartsville, S. C.

December 28, 1917	4.00	0.02	0.03	0.00	0.00	15.00	Negative
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Kingstree, S. C.

December 20, 1917	9.00	0.03	0.02	0.00	0.00	252.00	Negative
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Lancaster, S. C.

December 19, 1917	15.00	0.02	0.04	0.01	0.00	43.00	Negative
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Laurens, S. C.

December 7, 1917	5.00	0.01	0.03	0.30	0.00	113.00	Negative
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Manning, S. C.

December 9, 1917	3.00	0.04	0.02	0.00	0.00	180.00	Negative
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McColl, S. C.

December 28, 1917	5.00	0.01	0.03	0.10	0.00	20.00	Negative
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Marion, S. C.

December 7, 1917	3.00	0.02	0.03	0.00	0.00	175.00	Negative
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Newberry, S. C.

January 10, 1918	45.00	0.01	0.04	0.20	0.00	270.00	Negative
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Orangeburg, S. C.

December 11, 1917	4.00	0.01	0.04	0.00	0.00	88.00	Negative
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Rock Hill, S. C.

December 9, 1917	3.00	0.01	0.03	0.00	0.00	37.00	Negative
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ANALYSIS OF LAST QUARTERLY INSPECTION OF WATER—Continued.

Sample Drawn.	Chlorine.	Free Ammonia.	Albuminoid Am- monia.	Nitrogen as Ni- trates.	Nitrogen as Ni- trites.	Total Solids.	Bacterial Indica- tions of Contam- ination.	Chemical Indica- tions of Contam- ination.
Spartanburg, S. C.								
January 22, 1918	10.00	0.02	0.03	0.10	0.00	55.00	Negative	Negative
Sumter, S. C.								
December 9, 1917	6.00	0.03	0.03	0.30	0.00	36.00	Negative	Negative
Thimonsville, S. C.								
December 15, 1917	7.00	0.01	0.02	0.00	0.00	92.00	Negative	Negative
Union, S. C.								
December 2, 1917	5.00	0.04	0.04	0.00	0.00	50.00	Negative	Negative
Winnsboro, S. C.								
December 7, 1917	6.00	0.01	0.01	0.01	0.00	38.00	Negative	Negative
Yorkville, S. C.								
December 5, 1917	5.00	0.01	0.03	0.00	0.00	83.00	Negative	Negative

FINANCIAL STATEMENT.

The following is a correct statement of the expenditures of the State Board of Health for the fiscal year 1917, showing to whom paid and for what purpose. All claims against the Board are itemized and rendered in duplicate, the original being attached to warrant of Comptroller General and forwarded to his office for payment—the duplicate being filed in this office.

CONTINGENT.

1917	Voucher No.		
Feb. 28.	1.	To Nelle Davis, salary.....	\$ 100 00
Feb. 28.	2.	To F. A. Coward, expenses to Laboratory Conference and purchase of apparatus.....	76 85
Feb. 28.	3.	To F. A. Coward, Laboratory expenses.....	72 00
Mar. 1.	4.	To Jas. A. Hayne, incidental expenses, office.....	75 14
Mar. 1.	5.	To Palmetto National Bank, rent of offices.....	120 00
Mar. 1.	6.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	40 15
Mar. 1.	7.	To Western Union Telegraph Co., official telegrams.....	12 10
Mar. 1.	8.	To Columbia Railway, Gas and Electric Co., gas consumed.....	33 58
Mar. 1.	9.	To Columbia Lumber & Mfg. Co., lumber.....	20 07
Mar. 1.	10.	To Lorick & Lowrance, sundries.....	6 60
Mar. 1.	11.	To Waverley Drug Co., rubber gloves.....	2 50
Mar. 1.	12.	To Columbia Paper Co., twine.....	4 89
Mar. 1.	13.	To J. L. Minnaugh Co., towels for Laboratory.....	2 40
Mar. 1.	14.	To W. H. Coleman, postage stamps.....	25 00
Mar. 1.	15.	To American Geographical Institute, Atlas of United States.....	1 98
Mar. 1.	16.	To Germo-Mfg. Co., liquid soap.....	15 00
Mar. 1.	17.	To National Vaccine & Antitoxin Institute, diphtheria antitoxin.....	369 45
Mar. 6.	18.	To G. M. Carpenter, office supplies.....	15 25
Mar. 13.	19.	To Central Drug Co., Laboratory supplies.....	27 60
Mar. 13.	20.	To Jas. R. Cain, trip to Greenville.....	12 30
Mar. 13.	21.	To National Vaccine & Antitoxin Institute, diphtheria antitoxin.....	258 90
Mar. 15.	22.	To W. H. Coleman, postage stamps.....	25 00
Mar. 31.	23.	To H. M. Smith, salary.....	50 00
Mar. 31.	24.	To M. C. Davis, salary.....	50 00
Mar. 31.	25.	To Jas. A. Hayne, incidental expenses, office.....	21 38
Mar. 31.	26.	To F. A. Coward, Laboratory expenses.....	49 90
Mar. 31.	27.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	20 45
Mar. 31.	28.	To Columbia Railway, Gas & Electric Co., gas consumed.....	16 00
Mar. 21.	29.	To Palmetto Ice Co., ice tickets.....	21 00
Mar. 31.	30.	To Southern Aseptic Laboratories, absorbent cotton.....	4 83
Mar. 31.	31.	To Western Union Telegraph Co., official telegrams.....	9 19
Mar. 31.	32.	To Columbia Lumber & Mfg. Co., lumber.....	7 85
Mar. 31.	33.	To Morgan Co., Laboratory supplies.....	10 38
Mar. 31.	34.	To Schieffelin & Co., Laboratory supplies.....	11 20
Apr. 2.	35.	To National Vaccine & Antitoxin Institute, vaccine virus.....	207 61
Apr. 2.	36.	To E. Michaels, rabbits.....	13 20
Apr. 2.	37.	To Palmetto National Bank, rent of offices.....	40 00
Apr. 9.	38.	To W. H. Coleman, postage stamps.....	25 00
Apr. 9.	39.	To Columbia Seal & Stamp Co., Laboratory supplies.....	35 85
Apr. 10.	40.	To Southern Express Co., express on various parcels.....	7 73
Apr. 10.	41.	To J. T. McCaw, office supplies.....	34 85
Apr. 16.	42.	To National Vaccine & Antitoxin Institute, diphtheria antitoxin.....	316 95
Apr. 20.	43.	To Lorick & Lowrance, sundries.....	6 90
Apr. 20.	44.	To Columbia Lumber & Mfg. Co., lumber.....	6 73
Apr. 20.	45.	To Surgical Selling Co., Laboratory supplies.....	11 83
Apr. 20.	46.	To University of South Carolina, heating at Laboratory during Xmas holidays.....	30 00
Apr. 26.	47.	To J. T. McCaw, office supplies.....	6 10
Apr. 30.	48.	To M. C. Davis, salary.....	50 00
Apr. 30.	49.	To F. A. Coward, expenses to medical meetings and extra help at Laboratory.....	73 05

Voucher		No.		
1917				
Apr. 30.	50.	To W. H. Coleman, postage stamps.....	25	00
Apr. 30.	51.	To Palmetto National Bank, rent of offices.....	40	00
Apr. 30.	52.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	29	15
Apr. 30.	53.	To Columbia Railway, Gas & Electric Co., gas consumed.....	18	40
Apr. 30.	54.	To Palmetto Ice Co., ice tickets.....	11	00
Apr. 30.	55.	To Columbia Seal & Stamp Co., Laboratory supplies.....	9	15
Apr. 30.	56.	To Waverley Drug Co., rubber gloves.....	2	50
Apr. 30.	57.	To Southern Aseptic Laboratories, absorbent cotton.....	7	36
Apr. 30.	58.	To Gibson Co., medical instruments.....	36	75
Apr. 30.	59.	To Western Union Telegraph Co., official telegrams.....	11	18
Apr. 30.	60.	To Jas. A. Hayne, incidental expenses, office.....	32	55
Apr. 30.	61.	To H. M. Smith, salary.....	50	00
May 3.	62.	To American Medical Association, pamphlets on tuberculosis.....	90	00
May 3.	63.	To Lorick Bros., utensils for Laboratory.....	3	55
May 3.	64.	To Lorick & Lowrance, sundries.....	2	35
May 3.	65.	To Southern Express Co., express on various parcels.....	8	04
May 14.	66.	To Murray Drug Co., gas.....	2	40
May 14.	67.	To Arthur H. Thomas Co., centrifuge Co.....	3	50
May 14.	68.	To National Vaccine & Antitoxin Institute, diphtheria antitoxin.....	289	45
May 14.	69.	To J. A. Majors Co., Medical Journals.....	5	00
May 21.	70.	To Central Drug Co., Laboratory supplies.....	18	55
May 31.	71.	To M. C. Davis, salary.....	50	00
May 31.	72.	To H. M. Smith, salary.....	50	00
May 31.	73.	To F. A. Coward, trip to Greenville and Cheraw, rabbits, extra help.....	64	25
May 31.	74.	To Southern Express Co., express on various parcels.....	1	83
May 31.	75.	To Columbia Railway, Gas & Electric Co., gas consumed.....	22	50
May 31.	76.	To Jas. A. Covington, county map.....	5	00
May 31.	77.	To Jas. A. Hayne, incidental expenses, office.....	32	59
June 1.	78.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	19	80
June 1.	79.	To Western Union Telegraph Co., official telegrams.....	14	23
June 1.	80.	To Columbia Paper Co., wrapping paper.....	3	85
June 1.	81.	To Tervin-Childs Electric Co., wiring to lights and motor.....	21	93
June 1.	82.	To Murray Drug Co., cartons.....	7	68
June 1.	83.	To E. R. Squibb & Sons, typhoid vaccine.....	360	00
June 1.	84.	To Webb's Art Store, glass and frame for Laboratory.....	7	45
June 1.	85.	To Murray Drug Co., cartons.....	7	68
June 1.	86.	To Columbia Lumber & Mfg. Co., lumber.....	2	40
June 1.	87.	To Tervin-Childs Electric Co., starting up refrigerator.....	9	25
June 1.	88.	To Columbia Paper Co., twine.....	2	00
June 1.	89.	To H. J. Bassler Co., plumbing repair at Laboratory.....	13	60
June 1.	90.	To Columbia Seal & Stamp Co., paper.....	4	65
June 11.	91.	To J. T. McCaw, office supplies.....	15	75
June 11.	92.	To Underwood Typewriter Co., coupon book.....	3	50
June 14.	93.	To National Vaccine & Antitoxin Institute, diphtheria antitoxin.....	286	85
June 15.	94.	To Palmetto National Bank, rent of offices.....	40	00
June 15.	95.	To Central Drug Co., Laboratory supplies.....	23	00
June 29.	96.	To Columbia Lumber & Mfg. Co., lumber.....	4	15
June 29.	97.	To Arthur H. Thomas Co., Laboratory supplies.....	12	24
June 29.	98.	To Germon-Mfg. Co., cresylane.....	12	50
June 30.	99.	To M. C. Davis, salary.....	50	00
June 30.	100.	To H. M. Smith, salary.....	50	00
June 30.	101.	To F. A. Coward, Laboratory expenses and extra help.....	48	65
June 30.	102.	To Jas. A. Hayne, incidental expenses, office.....	32	61
June 30.	103.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	19	67
June 30.	104.	To Columbia Railway, Gas & Electric Co., gas consumed.....	19	30
June 30.	105.	To Western Union Telegraph Co., official telegrams.....	16	60
July 6.	106.	To Palmetto Ice Co., ice tickets.....	16	00
July 6.	107.	To J. T. McCaw, office supplies.....	18	30
July 6.	108.	To H. J. Bassler Co., repairing sterilizer.....	6	15
July 6.	109.	To Palmetto National Bank, rent of offices.....	40	00
July 6.	110.	To Murray Drug Co., test tubes.....	1	50
July 6.	111.	To E. R. Squibb & Sons, typhoid bacterin.....	162	00
July 6.	112.	To Southern Express Co., express on various parcels.....	1	73
July 6.	113.	To Waverley Drug Co., rubber gloves.....	2	50
July 9.	114.	To Lorick & Lowrance, sundries.....	6	35
July 9.	115.	To Union Paper Co., cases and covers.....	68	80
July 20.	116.	To National Vaccine & Antitoxin Institute, vaccine virus.....	232	70
July 25.	117.	To National Vaccine & Antitoxin Institute, diphtheria antitoxin.....	404	60
July 25.	118.	To Selig Co., sweeping compound and individual drinking cups.....	19	00
July 31.	119.	To M. C. Davis, salary.....	50	00
July 31.	120.	To H. M. Smith, salary.....	50	00
July 31.	121.	To F. A. Coward, Laboratory expenses.....	74	05
July 31.	122.	To Southern Aseptic Laboratories, absorbent cotton.....	14	21
July 31.	123.	To Jas. A. Hayne, incidental expenses, office.....	14	68
July 31.	124.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	23	30

Voucher			
No.			
1917			
July 31. 125.	To Columbia Railway, Gas & Electric Co., gas consumed.....	22	86
July 30. 126.	To Western Union Telegraph Co., official telegrams.....	8	29
Aug. 1. 127.	To Palmetto National Bank, rent of offices.....	40	00
Aug. 1. 128.	To National Vaccine & Antitoxin Institute, diphtheria antitoxin.....	375	70
Aug. 4. 129.	To Palmetto Ice Co., ice tickets.....	16	00
Aug. 4. 130.	To Columbia Paper Co., wrapping paper.....	5	15
Aug. 4. 131.	To G. M. Carpenter, office supplies.....	2	70
Aug. 4. 132.	To E. R. Squibb & Sons, typhoid bacterin.....	3	38
Aug. 6. 133.	To J. T. McCaw, office supplies.....	11	25
Aug. 6. 134.	To Jno. D. Colson, services as special agent in the suppression of smallpox	56	60
Aug. 13. 135.	To Tervin-Childs Electric Co., setting up centrifugal machine.....	8	69
Aug. 13. 136.	To Murray Drug Co., glass tubing, motor and pestle.....	1	35
Aug. 14. 137.	To Eimer & Amend, Laboratory supplies.....	31	38
Aug. 14. 138.	To B-C Electric Co., belting, hooks and labor at Laboratory.....	8	40
Aug. 14. 139.	To Central Drug Co., Laboratory supplies.....	20	65
Aug. 31. 140.	To Selig Co., spray pump-knapsack.....	10	00
Aug. 31. 141.	To O. H. Eve, services as special agent in the suppression of smallpox	5	00
Aug. 31. 142.	To F. A. Coward, repairing instruments, guinea-pigs, extra help.....	43	95
Aug. 31. 143.	To M. C. Davis, salary.....	50	00
Aug. 31. 144.	To H. M. Smith, salary.....	50	00
Aug. 31. 145.	To Jas. A. Hayne, incidental expenses, office.....	25	53
Aug. 31. 146.	To Palmetto Ice Co., ice tickets.....	16	00
Aug. 31. 147.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages	17	85
Aug. 31. 148.	To Columbia Railway, Gas & Electric Co., gas consumed.....	23	20
Sept. 5. 149.	To J. T. McCaw, office supplies.....	75	55
Sept. 10. 150.	To Palmetto National Bank, rent of offices.....	40	00
Sept. 10. 151.	To Western Union Telegraph Co., official telegrams.....	13	87
Sept. 14. 152.	To Southern Express Co., express on various parcels.....	5	96
Sept. 15. 153.	To J. T. McCaw, multigraphing letters.....	79	75
Sept. 27. 154.	To Donald Shell, extra help.....	45	00
Sept. 28. 155.	To M. C. Davis, salary.....	50	00
Sept. 28. 156.	To H. M. Smith, salary.....	50	00
Sept. 28. 157.	To Braxton Davis, salary.....	55	00
Sept. 29. 158.	To M. S. Brown, salary.....	21	00
Sept. 29. 159.	To E. W. Grieshaber, salary.....	75	00
Sept. 29. 160.	To Rupert Young, salary.....	36	00
Sept. 29. 161.	To Jno. H. Young, salary.....	30	00
Sept. 29. 162.	To L. A. Riser, traveling expenses.....	52	40
Oct. 1. 163.	To Underwood Typewriter Co., coupon book.....	18	50
Oct. 1. 164.	To Palmetto Ice Co., ice tickets.....	12	06
Oct. 1. 165.	To E. R. Squibb & Sons, diphtheria antitoxin.....	574	65
Oct. 1. 166.	To Jno. Crompton Co., slides.....	156	32
Oct. 1. 167.	To Columbia Seal & Stamp Co., office supplies.....	3	95
Oct. 1. 168.	To Perry-Mann Electric Co., Mazdas.....	2	25
Oct. 1. 169.	To Schieffelin & Co., serum tubes.....	33	60
Oct. 1. 170.	To C. O. Brown & Bro., glass and putty.....	7	45
Oct. 2. 171.	To R. C. Roof, salary.....	80	00
Oct. 2. 172.	To F. M. Routh, salary.....	175	00
Oct. 2. 173.	To F. M. Routh, traveling expenses.....	71	00
Oct. 2. 174.	To V. W. Brabham, salary.....	166	67
Oct. 2. 175.	To V. W. Brabham, expense account.....	78	15
Oct. 2. 176.	To E. D. Delk, salary.....	50	00
Oct. 2. 177.	To W. P. Whetsell, salary.....	25	00
Oct. 3. 178.	To Western Union Telegraph Co., official telegrams.....	5	53
Oct. 3. 179.	To Palmetto National Bank, rent of offices.....	40	00
Oct. 3. 180.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages	20	35
Oct. 9. 181.	To Columbia Railway, Gas & Electric Co., gas consumed.....	4	50
Oct. 9. 182.	To J. T. McCaw, office supplies.....	33	81
Oct. 10. 183.	To E. R. Squibb & Sons, diphtheria antitoxin.....	1,110	15
Oct. 10. 184.	To Selig Co., individual drinking cups.....	9	00
Oct. 11. 185.	To S. T. Carter, Laboratory and office equipments, furniture, etc.....	17	00
Oct. 11. 186.	To Jas. A. Hayne, incidental expenses, office.....	37	02
Oct. 12. 187.	To Daggett Printing Co., envelopes.....	5	50
Oct. 19. 188.	To Waverley Drug Co., rubber gloves.....	2	50
Oct. 19. 189.	To Columbia Lumber & Mfg. Co., lumber.....	2	77
Oct. 19. 190.	To J. L. Minnaugh & Co., oil cloth.....	2	50
Oct. 19. 191.	To Arthur H. Thomas Co., Laboratory supplies.....	33	00
Oct. 19. 192.	To L. B. Blackwell, program and pamphlets.....	49	85
Oct. 19. 193.	To Educational Exhibition Co., exhibits.....	28	00
Oct. 19. 194.	To W. H. Coleman, postage stamps.....	25	00
Oct. 29. 195.	To E. A. Hines, expenses to medical meeting.....	35	00
Oct. 29. 196.	To E. R. Squibb & Sons, vaccine virus.....	272	66
Oct. 31. 197.	To Southern Express Co., express on various parcels.....	4	18
Oct. 31. 198.	To M. C. Davis, salary.....	50	00
Oct. 31. 199.	To H. M. Smith, salary.....	50	00
Oct. 31. 200.	To V. W. Brabham, salary.....	168	67
Oct. 31. 201.	To E. G. Able, salary.....	60	00

Voucher No.			
1917			
Oct. 31.	202.	To L. A. Riser, salary.....	208 33
Oct. 31.	203.	To L. H. Smith, salary.....	150 00
Oct. 31.	204.	To E. W. Grieshaber, salary.....	75 00
Oct. 31.	205.	To C. C. Gambrell, expenses to medical meeting.....	36 60
Oct. 31.	206.	To Columbia Railway, Gas & Electric Co., gas consumed.....	14 74
Oct. 31.	207.	To Leigon Young, salary.....	22 20
Oct. 31.	208.	To Braxton Davis, salary.....	65 00
Oct. 31.	209.	To L. H. Smith, salary.....	73 10
Oct. 31.	210.	To F. M. Routh, salary.....	175 00
Oct. 31.	211.	To R. C. Roof, salary.....	80 00
Oct. 31.	212.	To Chas. Farris, salary.....	50 00
Oct. 31.	213.	To F. M. Routh, traveling expenses.....	54 00
Oct. 31.	214.	To Western Union Telegraph Co., official telegrams.....	9 55
Oct. 31.	215.	To H. K. Mulford Co., antimenigitis serum.....	36 00
Oct. 31.	216.	To H. K. Mulford Co., tetanus antitoxin.....	18 00
Oct. 31.	217.	To Jas. A. Hayne, incidental expenses, office.....	21 48
Nov. 1.	218.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	22 41
Nov. 1.	219.	To F. A. Coward, expenses to medical meeting.....	100 80
Nov. 1.	220.	To Palmetto Ice Co., ice tickets.....	8 00
Nov. 7.	221.	To L. A. Riser, traveling expenses.....	91 83
Nov. 10.	222.	To W. C. Able, services as special agent in the suppression of smallpox.....	21 00
Nov. 10.	223.	To Columbia Sign Works, signs and banners for booth at State Fair.....	18 50
Nov. 10.	224.	To Braxton Davis, expenses to Florence.....	9 60
Nov. 10.	225.	To V. W. Brabham, traveling expenses.....	65 25
Nov. 10.	226.	To Lorick & Lowrance, sundries.....	2 45
Nov. 10.	227.	To E. R. Squibb & Sons, diphtheria antitoxin.....	951 75
Nov. 21.	228.	To Mrs. M. C. Gilliam, board for seven persons confined to house during quarantine.....	21 00
Nov. 21.	229.	To Columbia Paper Co., twine.....	3 15
Nov. 21.	230.	To Robt. Stork, placards for State Fair.....	38 00
Nov. 23.	231.	To Central Drug Co., Laboratory supplies.....	18 85
Nov. 27.	232.	To Arthur H. Thomas Co., Laboratory supplies.....	21 62
Nov. 27.	233.	To H. K. Mulford Co., tetanus antitoxin.....	24 30
Nov. 30.	234.	To M. C. Davis, salary.....	50 00
Nov. 30.	235.	To H. M. Smith, salary.....	50 00
Nov. 30.	236.	To E. A. Hines, expenses of inspection of Winthrop College.....	40 40
Nov. 30.	237.	To J. T. Howell, services as special agent in the suppression of scarlet fever.....	5 00
Nov. 30.	238.	To Arthur H. Thomas Co., Laboratory supplies.....	16 38
Nov. 30.	239.	To W. H. Coleman, postage stamps.....	40 00
Nov. 30.	240.	To L. H. Smith, salary.....	150 00
Nov. 30.	241.	To L. H. Smith, traveling expenses.....	71 80
Nov. 30.	242.	To Braxton Davis, salary.....	65 00
Nov. 30.	243.	To W. A. Washington, salary.....	19 20
Nov. 30.	244.	To V. W. Brabham, salary.....	166 67
Nov. 30.	245.	To E. G. Able, salary.....	60 00
Nov. 30.	246.	To Jas. A. Hayne, incidental expenses, office.....	16 65
Nov. 30.	247.	To Columbia Railway, Gas & Electric Co., gas consumed.....	21 00
Nov. 30.	248.	To V. W. Brabham, traveling expenses.....	81 10
Nov. 30.	249.	To F. M. Routh, traveling expenses.....	76 10
Nov. 30.	250.	To W. F. Trasher, salary.....	67 50
Nov. 30.	251.	To R. C. Roof, salary.....	80 00
Nov. 30.	252.	To F. M. Routh, salary.....	175 00
Nov. 30.	253.	To J. T. McCaw, office supplies.....	17 25
Nov. 30.	254.	To Palmetto National Bank, rent of offices.....	116 00
Nov. 30.	255.	To Western Union Telegraph Co., official telegrams.....	12 88
Nov. 30.	256.	To L. A. Riser, traveling expenses.....	100 36
Nov. 30.	257.	To F. A. Coward, Laboratory expenses.....	41 25
Dec. 5.	258.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	19 15
Dec. 5.	259.	To Palmetto Ice Co., ice tickets.....	8 00
Dec. 13.	260.	To Columbia Seal and Stamp Co., office supplies.....	7 95
Dec. 13.	261.	To Gulf & Atlantic Insurance Co., annual premium on bond of State Health Officer.....	7 00
Dec. 13.	262.	To Underwood Typewriter Co., coupon book.....	7 00
Dec. 13.	263.	To Dr. F. L. Parker, postage stamps for official business, mailing cases, etc.....	29 00
Dec. 15.	264.	To E. Leitz, microscope stand.....	65 25
Dec. 22.	265.	To L. A. Riser, salary.....	208 33
Dec. 22.	266.	To E. W. Grieshaber, salary.....	75 00
Dec. 22.	267.	To M. C. Davis, salary.....	50 00
Dec. 22.	268.	To H. M. Smith, salary.....	50 00
Dec. 22.	269.	To F. A. Coward, Laboratory expenses.....	33 94
Dec. 22.	270.	To E. R. Squibb & Sons, diphtheria antitoxin.....	1,017 70
Dec. 24.	271.	To H. K. Mulford Co., tetanus antitoxin.....	9 00
Dec. 24.	272.	To H. K. Mulford Co., antimenigitis serum.....	36 00
Dec. 24.	273.	To National Motion Picture Co., motion picture health film.....	140 00
Dec. 24.	274.	To Powers & Anderson, Laboratory supplies.....	13 50
Dec. 24.	275.	To Schiefelin & Co., blood serum culture.....	33 60

Voucher No.			
1917			
Dec. 26.	276.	To E. A. Hines, inspection of Clemson College.....	9 80
Dec. 28.	277.	To J. T. McCaw, office supplies.....	49 05
Dec. 28.	278.	To Columbia Paper Co., wrapping paper.....	4 13
Dec. 28.	279.	To Columbia Railway, Gas & Electric Co., heaters.....	4 50
Dec. 28.	280.	To State and Provincial Boards of Health of North America, assess- ment dues.....	10 00
Dec. 29.	281.	To E. R. Squibb & Sons, typhoid vaccine.....	599 10
Dec. 31.	282.	To Morgan Co., ampules.....	109 03
Dec. 31.	283.	To Western Union Telegraph Co., official telegrams.....	12 81
Dec. 31.	284.	To Columbia Railway, Gas & Electric Co., gas consumed.....	21 60
Dec. 31.	285.	To Daggett Printing Co., printing.....	3 50
Dec. 31.	286.	To H. K. Mulford Co., tetanus antitoxin.....	9 00
Dec. 31.	287.	To Southern Bell Telephone & Telegraph Co., official phone and toll messages.....	24 40
Dec. 31.	288.	To Selig Co., sweeping compound and floor brush.....	70 50
Dec. 31.	289.	To Jas. A. Hayne, incidental expenses, office.....	20 43
Jan. 11.	To	Palmetto Ice Co., ice tickets.....	12 00
Jan. 11.	291.	To Southern Express Co., express on various parcels.....	6 74
Jan. 15.	292.	To E. Leitz, centrifuge tubes.....	7 80
Jan. 28.	293.	To E. R. Squibb & Sons, diphtheria antitoxin.....	498 05
			\$17,880 31
Appropriation			\$20,000 00
Expenditures			17,880 31
Balance			\$2,119 69
Outstanding Bills (?)			

VITAL STATISTICS.

Feb. 27.	1.	To W. H. Coleman, postage stamps.....	25 00
Feb. 28.	2.	To C. W. Miller, salary.....	250 00
Feb. 28.	3.	To P. T. Washington, salary.....	120 00
Feb. 28.	4.	To E. M. Rouquie, salary.....	100 00
Mar. 1.	5.	To Southern Bell Telephone & Telegraph Co., official phone service....	8 00
Mar. 1.	6.	To R. L. Bryan Co., office supplies.....	6 50
Mar. 1.	7.	To C. L. Cain, salary.....	70 00
Mar. 6.	8.	To G. M. Carpenter, office supplies.....	3 80
Mar. 7.	9.	To J. T. McCaw, office supplies and printing.....	120 80
Mar. 31.	10.	To C. W. Miller, salary.....	125 00
Mar. 31.	11.	To P. T. Washington, salary.....	60 00
Mar. 31.	12.	To E. M. Rouquie, salary.....	50 00
Mar. 31.	13.	To C. L. Cain, salary.....	40 00
Apr. 2.	14.	To Southern Bell Telephone & Telegraph Co., official phone service....	4 00
Apr. 2.	15.	To C. W. Miller, overdue postage.....	7 35
Apr. 2.	16.	To G. M. Carpenter, stationery.....	1 30
Apr. 9.	17.	To Columbia Seal & Stamp Co., office supplies.....	7 75
Apr. 11.	18.	To J. T. McCaw, binding certificates, postal cards, etc.....	80 35
Apr. 24.	19.	To C. W. Miller, extra work of E. S. Read.....	3 50
Apr. 26.	20.	To J. T. McCaw, printing.....	331 75
Apr. 30.	21.	To C. W. Miller, salary.....	125 00
Apr. 30.	22.	To P. T. Washington, salary.....	60 00
Apr. 30.	23.	To E. M. Rouquie, salary.....	50 00
Apr. 30.	24.	To C. L. Cain, salary.....	40 00
Apr. 30.	25.	To Southern Bell Telephone & Telegraph Co., official phone service...	4 00
Apr. 30.	26.	To Letter Shop, multigraphed letters.....	3 50
Apr. 30.	27.	To G. M. Carpenter, stationery.....	3 90
Apr. 30.	28.	To J. T. McCaw, binding certificates, postal cards, etc.....	109 20
May 19.	29.	To W. H. Coleman, postage stamps.....	25 00
May 31.	30.	To C. W. Miller, salary.....	125 00
May 31.	31.	To P. T. Washington, salary.....	60 00
May 31.	32.	To E. M. Rouquie, salary.....	50 00
May 31.	33.	To C. L. Cain, salary.....	40 00
May 31.	34.	To J. T. McCaw, card index sections.....	111 60
June 1.	35.	To Southern Bell Telephone & Telegraph Co., official phone service....	4 00
June 1.	36.	To G. M. Carpenter, office supplies.....	3 50
June 6.	37.	To C. W. Miller, incidental expenses, office.....	2 55
June 11.	38.	To J. T. McCaw, envelopes.....	23 35
June 11.	39.	To J. T. McCaw, binding certificates and office furniture.....	169 60
June 22.	40.	To C. W. Miller, overdue postage and reseating chairs.....	1 00
June 22.	41.	To C. W. Miller, salary.....	125 00
June 30.	42.	To P. T. Washington, salary.....	60 00
June 30.	43.	To E. M. Rouquie, salary.....	50 00
June 30.	44.	To C. L. Cain, salary.....	40 00
June 30.	45.	To Southern Bell Telephone & Telegraph Co., official phone service...	4 00
July 6.	46.	To J. T. McCaw, binding certificates.....	15 40
July 20.	47.	To Palmetto Ice Co., ice tickets.....	4 00
July 20.	48.	To G. M. Carpenter, office supplies.....	8 35
July 31.	49.	To C. W. Miller, salary.....	125 00
July 31.	50.	To P. T. Washington, salary.....	60 00
July 31.	51.	To E. M. Rouquie, salary.....	50 00

Voucher		No.		
1917				
July 31.	52.	To C. L. Cain, salary.....	40	00
July 31.	53.	To Maxie Rouquie, extra help, salary.....	15	00
July 31.	54.	To Southern Bell Telephone & Telegraph Co., official phone service...	4	00
Aug. 4.	55.	To G. M. Carpenter, office supplies.....	1	50
Aug. 4.	56.	To C. W. Miller, overdue postage and reseating chair.....	2	63
Aug. 6.	57.	To J. T. McCaw, office supplies.....	112	50
Aug. 7.	58.	To J. T. McCaw, printing.....	18	95
Aug. 20.	59.	To W. H. Coleman, postage stamps.....	25	00
Aug. 31.	60.	To C. W. Miller, salary.....	125	00
Aug. 31.	61.	To P. T. Washington, salary.....	60	00
Aug. 31.	62.	To E. M. Rouquie, salary.....	50	00
Aug. 31.	63.	To C. L. Cain, salary.....	40	00
Aug. 31.	64.	To Harriet Cain, extra help, salary.....	10	50
Aug. 31.	65.	To Palmetto Ice Co., ice tickets.....	2	00
Aug. 31.	66.	To Southern Bell Telephone & Telegraph Co., official phone service...	4	15
Sept. 5.	67.	To J. T. McCaw, office supplies.....	13	70
Sept. 10.	68.	To C. W. Miller, overdue postage, etc.....	2	21
Sept. 15.	69.	To J. T. McCaw, binding certificates.....	14	30
Sept. 28.	70.	To C. W. Miller, salary.....	125	00
Sept. 28.	71.	To P. T. Washington, salary.....	60	00
Sept. 28.	72.	To E. M. Rouquie, salary.....	50	00
Sept. 28.	73.	To C. L. Cain, salary.....	40	00
Oct. 1.	74.	To Palmetto Ice Co., ice tickets.....	2	00
Oct. 1.	75.	To Letter Shop, multigraphed letters.....	1	90
Oct. 10.	76.	To Southern Bell Telephone & Telegraph Co., official phone service...	4	00
Oct. 10.	77.	To R. C. Williams & Sons, chair.....	6	50
Oct. 10.	78.	To Columbia Office Supply Co., office supplies.....	1	75
Oct. 19.	79.	To J. T. McCaw, certificates and index cards.....	64	05
Oct. 19.	80.	To C. W. Miller, office supplies.....	2	10
Oct. 31.	81.	To C. W. Miller, salary.....	125	00
Oct. 31.	82.	To P. T. Washington, salary.....	60	00
Oct. 31.	83.	To C. L. Cain, salary.....	50	06
Nov. 1.	84.	To Southern Bell Telephone & Telegraph Co., official phone service...	4	75
Nov. 21.	85.	To J. T. McCaw, binding certificates and stationery.....	14	20
Nov. 21.	86.	To J. T. McCaw, index cards.....	8	00
Nov. 23.	87.	To W. H. Coleman, postage stamps.....	50	00
Nov. 23.	88.	To P. T. Washington, extra services.....	20	00
Nov. 23.	89.	To C. L. Cain, extra services.....	20	00
Nov. 30.	90.	To C. W. Miller, salary.....	125	00
Nov. 30.	91.	To P. T. Washington, salary.....	60	00
Nov. 30.	92.	To C. L. Cain, salary.....	50	00
Dec. 5.	93.	To Southern Bell Telephone & Telegraph Co., official phone service...	4	00
Dec. 5.	94.	To Palmetto Ice Co., ice tickets.....	2	00
Dec. 5.	95.	To C. W. Miller, incidental expenses, office.....	3	21
Dec. 22.	96.	To C. W. Miller, salary.....	158	33
Dec. 22.	97.	To P. T. Washington, salary.....	76	66
Dec. 22.	98.	To C. L. Cain, salary.....	60	00
Dec. 28.	99.	To J. T. McCaw, certificates, index cards, etc.....	99	00
Dec. 31.	100.	To Southern Bell Telephone & Telegraph Co., official phone service...	4	55
Dec. 31.	101.	To Selig Co., drinking cups.....	9	00
Dec. 31.	102.	To Columbia Railway, Gas & Electric Co., heaters.....	7	50
Dec. 31.	103.	To C. W. Miller, incidental expenses, office.....	3	45
Jan. 25.	104.	To J. T. McCaw, office supplies, binding certificates, etc.....	26	63
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Appropriation				\$4,888 59
Expenditures				4,888 59
Balance				111 41
Outstanding Bills (?)				

INTENSIVE COUNTY HEALTH WORK.

Mar. 31.	1.	To V. W. Brabham, salary.....	166	67
Mar. 31.	2.	To F. M. Cain, salary.....	75	00
Mar. 31.	3.	To W. J. Cauthen, salary.....	65	00
Mar. 31.	4.	To L. J. Rasche, salary.....	10	00
Mar. 31.	5.	To T. J. Whitaker, salary.....	10	00
Mar. 31.	6.	To V. W. Brabham, traveling expenses.....	66	15
Mar. 31.	7.	To F. M. Routh, salary.....	175	00
Mar. 31.	8.	To R. C. Roof, salary.....	79	80
Mar. 31.	9.	To T. B. Sims, salary and traveling expenses.....	61	50
Mar. 31.	10.	To F. M. Routh, traveling expenses.....	59	70
Apr. 11.	11.	To J. T. McCaw, health cards, etc.....	154	55
Apr. 11.	12.	To L. A. Riser, salary.....	183	33
Apr. 11.	13.	To L. A. Riser, traveling expenses.....	76	90
Apr. 30.	14.	To F. M. Routh, salary.....	186	66
Apr. 30.	15.	To F. M. Routh, traveling expenses.....	72	20
Apr. 30.	16.	To R. C. Roof, salary.....	75	00
Apr. 30.	17.	To T. B. Sims, salary.....	60	06

Voucher No.			
1917			
Apr. 30.	18.	To V. W. Brabham, traveling expenses.....	85 95
Apr. 30.	19.	To V. W. Brabham, salary.....	166 66
Apr. 30.	20.	To F. M. Cain, salary.....	37 50
Apr. 30.	21.	To W. J. Cauthen, salary.....	65 00
Apr. 30.	22.	To W. S. Whitaker, salary.....	35 00
Apr. 30.	23.	To L. J. Rasche, salary.....	50 00
Apr. 30.	24.	To B. D. Ward, salary.....	13 34
Apr. 30.	25.	To G. L. Quattlebaum, salary.....	24 00
Apr. 30.	26.	To L. A. Riser, salary.....	208 33
Apr. 30.	27.	To L. A. Riser, traveling expxenses.....	96 39
Apr. 30.	28.	To E. W. Grieshaber, salary.....	75 00
Apr. 30.	29.	To F. M. Routh, part of salary.....	8 34
Apr. 30.	30.	To Underwood Typewriter Co., Typewriter.....	83 03
May 8.	31.	To W. H. Coleman, postage stamps.....	25 00
May 12.	32.	To Bausch & Lomb Optical Co., repairing stand.....	10 85
May 23.	33.	To L. J. Rasche, salary.....	36 67
May 31.	34.	To L. A. Riser, salary.....	208 33
May 31.	35.	To L. A. Riser, traveling expenses.....	29 05
May 31.	36.	To E. W. Grieshaber, salary.....	75 00
May 31.	37.	To V. W. Brabham, salary.....	166 67
May 31.	38.	To V. W. Brabham, traveling expenses.....	61 35
May 31.	39.	To W. S. Whitaker, salary.....	58 00
May 31.	40.	To B. D. Ward, salary.....	55 00
May 31.	41.	To W. J. Cauthen, salary.....	70 00
May 31.	42.	To F. M. Routh, salary.....	166 66
May 31.	43.	To F. M. Routh, additional salary.....	8 34
May 31.	44.	To F. M. Routh, traveling expenses.....	79 70
May 31.	45.	To R. C. Roof, salary.....	75 00
May 31.	46.	To T. B. Sims, salary.....	65 00
June 11.	47.	To J. T. McCaw, envelopes.....	46 65
June 15.	48.	To American Medical Association, pamphlets.....	62 50
June 30.	49.	To V. W. Brabham, salary.....	166 67
June 30.	50.	To W. J. Cauthen, salary.....	70 00
June 30.	51.	To W. D. Ward, salary.....	60 00
June 30.	52.	To J. H. Spann, salary.....	20 00
June 30.	53.	To E. W. Grieshaber, salary.....	75 00
June 30.	54.	To L. A. Riser, salary.....	208 33
June 30.	55.	To L. A. Riser, traveling expenses.....	82 60
June 30.	56.	To F. M. Routh, salary.....	175 00
June 30.	57.	To F. M. Routh, traveling expenses.....	73 65
June 30.	58.	To R. C. Roof, salary.....	75 00
June 30.	59.	To T. B. Sims, salary.....	65 00
July 3.	60.	To V. W. Brabham, traveling expenses.....	69 90
July 31.	61.	To L. H. Smith, salary.....	150 00
July 31.	62.	To E. W. Grieshaber, salary.....	75 00
July 31.	63.	To L. A. Riser, salary.....	208 33
July 31.	64.	To F. M. Routh, salary.....	175 00
July 31.	65.	To F. M. Routh, traveling expenses.....	75 75
July 31.	66.	To R. C. Roof, salary.....	80 00
July 31.	67.	To L. A. Riser, traveling expenses.....	92 10
Aug. 31.	68.	To F. M. Routh, salary.....	175 60
Aug. 31.	69.	To Butler Heron, salary.....	60 00
Aug. 31.	70.	To L. H. Smith, salary.....	150 00
Aug. 31.	71.	To L. A. Riser, salary.....	208 33
Aug. 31.	72.	To L. A. Riser, traveling expenses.....	71 70
Aug. 31.	73.	To E. W. Grieshaber, salary.....	75 00
Sept. 29.	74.	To L. A. Riser, salary.....	208 33
Sept. 29.	75.	To L. H. Smith, salary.....	150 00
Sept. 29.	76.	To L. H. Smith, traveling expenses.....	74 50
Dec. 27.	77.	To W. H. Coleman, postage stamps.....	4 54

Total Expenditures.....	\$7,000 00
Appropriation	\$7,000 00

MAINTENANCE TUBERCULOSIS CAMP.

Feb. 28.	1.	To Ernest Cooper, salary.....	250 00
Feb. 28.	2.	To Mrs. Clara Wood, salary.....	100 00
Feb. 28.	3.	To A. T. Painter, salary.....	100 00
Feb. 28.	4.	To Wm. Williams, salary.....	50 00
Feb. 28.	5.	To Wm. Adams, salary.....	50 00
Feb. 28.	6.	To Johnson Belton, salary.....	40 00
Feb. 28.	7.	To Turner Mobley, salary.....	22 00
Feb. 28.	8.	To Julia Watson, salary.....	20 00
Mar. 1.	9.	To Southern Bell Telephone & Telegraph Co., phone service.....	20 63
Mar. 1.	10.	To Lorick & Lowrance, groceries.....	247 92
Mar. 1.	11.	To Southern States Supply Co., repairs.....	14 43
Mar. 1.	12.	To Murray Drug Co., druss.....	2 59
Mar. 1.	13.	To S. S. Selig, Jr., sputum cup holders.....	10 53
Mar. 1.	14.	To Stone & Forsyth Co., sputum cups.....	81 25
Mar. 1.	15.	To Standard Oil Co., gasoline.....	93 85

Voucher		No.		
1917				
Mar. 1.	16.	To A. I. Rembert, salary.....	166	66
Mar. 13.	17.	To Capital City Laundry and Dye Works, laundry service.....	75	48
Mar. 30.	18.	To A. I. Rembert, salary.....	83	33
Mar. 31.	19.	To Ernest Cooper, salary.....	125	00
Mar. 31.	20.	To Mrs. Clara Wood, salary.....	50	00
Mar. 31.	21.	To A. T. Painter, salary.....	50	00
Mar. 31.	22.	To Wm. Adams, salary.....	25	00
Mar. 31.	23.	To Wm. Williams, salary.....	25	00
Mar. 31.	24.	To Johnson Belton, salary.....	20	00
Mar. 31.	25.	To A. T. Painter, salary.....	9	75
Mar. 31.	26.	To Frank S. Betz Co., hospital supplies.....	84	50
Mar. 31.	27.	To Lorick & Lowrance, groceries.....	534	36
Apr. 2.	28.	To Southern Bell Telephone & Telegraph Co., phone service.....	11	19
Apr. 2.	29.	To Capital City Laundry and Dye Works, laundry service.....	34	40
Apr. 10.	30.	To J. T. McCaw, report blanks and signature stamps.....	12	50
Apr. 10.	31.	To J. W. Bunch, hay.....	44	52
Apr. 20.	32.	To Lorick & Lowrance, groceries.....	973	75
Apr. 20.	33.	To Southern States Supply Co., plumbing supplies.....	3	30
Apr. 20.	34.	To Surgical Selling Co., thermometers.....	23	20
Apr. 20.	35.	To Gulf Refining Co., kerosene and gasoline.....	35	63
Apr. 20.	36.	To Union Carbide Sales Co., carbide.....	58	75
Apr. 20.	37.	To S. T. Carter, premium on insurance.....	1	72
Apr. 20.	38.	To A. I. Rembert, traveling expenses.....	16	30
Apr. 30.	39.	To Ernest Cooper, salary.....	125	00
Apr. 30.	40.	To Mrs. Clara Wood, salary.....	50	00
Apr. 30.	41.	To A. T. Painter, salary.....	50	00
Apr. 30.	42.	To Wm. Adams, salary.....	25	00
Apr. 30.	43.	To Wm. Williams, salary.....	25	00
Apr. 30.	44.	To Johnson Belton, salary.....	20	00
Apr. 30.	45.	To Chas. Geiger, salary.....	19	25
Apr. 30.	46.	To Ada Jones, salary.....	9	00
Apr. 30.	47.	To Martha Whitaker, salary.....	8	00
Apr. 30.	48.	To A. I. Rembert, salary.....	83	33
Apr. 30.	49.	To Southern Bell Telephone & Telegraph Co., phone service.....	11	24
Apr. 30.	50.	To J. T. McCaw, application blanks and stamped envelopes.....	26	60
Apr. 30.	51.	To Perry-Mann Electric Co., circuit-breaker electric switch.....	7	20
May 9.	52.	To A. I. Rembert, traveling expenses.....	13	40
May 14.	53.	To Lorick & Lowrance, groceries.....	892	32
May 31.	54.	To Ernest Cooper, salary.....	125	00
May 31.	55.	To A. T. Painter, salary.....	50	00
May 31.	56.	To Mrs. Clara Wood, salary.....	50	00
May 31.	57.	To Wm. Williams, salary.....	25	00
May 31.	58.	To Wm. Adams, salary.....	25	00
May 31.	59.	To John Washington, salary.....	8	35
June 1.	60.	To Southern Bell Telephone & Telegraph Co., phone service.....	10	43
June 1.	61.	To A. I. Rembert, salary.....	83	33
June 1.	62.	To Capital City Laundry and Dye Works, laundry service.....	86	20
June 1.	63.	To A. T. Painter, laundry.....	6	75
June 12.	64.	To Lorick & Lowrance, groceries.....	100	42
June 30.	65.	To Gulf Refining Co., kerosene and gasoline.....	43	25
June 30.	66.	To A. I. Rembert, salary.....	83	33
June 30.	67.	To Ernest Cooper, salary.....	125	00
June 30.	68.	To A. T. Painter, salary.....	50	00
June 30.	69.	To Mrs. Clara Wood, salary.....	50	00
June 30.	70.	To Wm. Adams, salary.....	25	00
June 30.	71.	To Wm. Williams, salary.....	25	00
June 30.	72.	To Lottie Lorick, salary.....	10	00
June 30.	73.	To Katherine Green, salary.....	10	00
June 30.	74.	To Carrison Autun, salary.....	20	00
June 30.	75.	To Southern Bell Telephone & Telegraph Co., phone service.....	9	79
July 9.	76.	To Capital City Laundry and Dye Works, laundry service.....	49	27
July 31.	77.	To A. I. Rembert, salary.....	83	33
July 31.	78.	To Ernest Cooper, salary.....	125	00
July 31.	79.	To A. T. Painter, salary.....	50	00
July 31.	80.	To Mrs. Clara Wood, salary.....	50	00
July 31.	81.	To Wm. Adams, salary.....	25	00
July 31.	82.	To Wm. Williams, salary.....	25	00
July 31.	83.	To Katherine Green, salary.....	10	00
July 31.	84.	To Lottie Lorick, salary.....	10	00
July 31.	85.	To Carrison Autun, salary.....	20	00
July 31.	86.	To Roosevelt Autun, salary.....	12	00
Aug. 4.	87.	To A. T. Painter, salary.....	50	00
Aug. 4.	88.	To Southern Bell Telephone & Telegraph Co., phone service.....	10	74
Aug. 31.	89.	To Capital City Laundry and Dye Works, laundry service.....	43	81
Aug. 31.	90.	To Ernest Cooper, salary.....	125	00
Aug. 31.	91.	To Mrs. Clara Wood, salary.....	50	00
Aug. 31.	92.	To Wm. Williams, salary.....	25	00
Aug. 31.	93.	To Wm. Adams, salary.....	25	00
Aug. 31.	94.	To A. I. Rembert, salary.....	83	33
Aug. 31.	95.	To Julia Watson, salary.....	10	00

Voucher			
1917	No.		
Aug. 31.	96.	To Lottie Lorick, salary.....	10 00
Aug. 31.	97.	To Katherine Green, salary.....	10 00
Sept. 29.	98.	To A. T. Rembert, salary.....	83 23
Sept. 29.	99.	To Wm. Adams, salary.....	25 00
Sept. 29.	100.	To A. T. Painter, salary.....	50 00
Sept. 29.	101.	To Mrs. Clara Wood, salary.....	50 00
Sept. 29.	102.	To Ernest Cooper, salary.....	125 00
Sept. 29.	103.	To Wm. Williams, salary.....	25 00
Oct. 4.	104.	To Etta Bell, salary.....	6 65
Oct. 4.	105.	To Alex. Lewis, salary.....	8 00
Oct. 10.	106.	To Katherine Green, salary.....	12 00
Oct. 10.	107.	To Southern Bell Telephone & Telegraph Co., phone service.....	19 93
Oct. 10.	108.	To Capital City Laundry and Dye Works, laundry service.....	70 30
Oct. 19.	109.	To Lorick & Lowrance, groceries.....	102 57
Oct. 30.	112.	To Adlue Milling Co., dairy food.....	52 00
Oct. 19.	111.	To Lorick & Lowrance, groceries.....	144 69
Oct. 30.	112.	To Adlue Milling Co., dairy food.....	52 00
Oct. 31.	113.	To Ernest Cooper, salary.....	125 00
Oct. 31.	114.	To A. T. Painter, salary.....	50 00
Oct. 31.	115.	To Mrs. Clara Wood, salary.....	50 00
Oct. 31.	116.	To Wm. Williams, salary.....	25 00
Oct. 31.	117.	To Wm. Adams, salary.....	25 00
Oct. 31.	118.	To Katherine Green, salary.....	12 00
Oct. 31.	119.	To Alex. Lewis, salary.....	20 00
Oct. 31.	120.	To Etta Bell, salary.....	10 00
Oct. 31.	121.	To Texas Co., crystalite—gasoline.....	85 95
Nov. 1.	122.	To Southern Bell Telephone & Telegraph Co., phone service.....	10 14
Nov. 13.	123.	To Becton, Dickinson & Co., thermometers, etc.....	28 68
Nov. 13.	124.	To Selig Co., paper napkins.....	50 00
Nov. 13.	125.	To H. W. Baker Linen Co., sheets and cases.....	386 67
Nov. 13.	126.	To Capital City Laundry and Dye Works, laundry service.....	16 52
Nov. 20.	127.	To J. T. McCaw, letter folders, examination blanks, etc.....	47 80
Nov. 30.	128.	To Ernest Cooper, salary.....	125 00
Nov. 30.	129.	To Mrs. Clara Wood, salary.....	50 00
Nov. 30.	130.	To A. T. Painter, salary.....	50 00
Nov. 30.	131.	To Wm. Williams, salary.....	25 00
Nov. 30.	132.	To Wm. Adams, salary.....	25 00
Nov. 30.	133.	To Percy Adams, salary.....	22 00
Nov. 30.	134.	To Alex. Lewis, salary.....	20 00
Nov. 30.	135.	To Etta Bell, salary.....	10 00
Nov. 30.	136.	To Corrie Bell, salary.....	10 00
Dec. 5.	137.	To Southern Bell Telephone & Telegraph Co., phone service.....	10 11
Dec. 14.	138.	To Shorter Watson, cotton seed and hulls.....	28 00
Dec. 14.	139.	To Clinchfield Fuel Co., fuel.....	253 64
Dec. 22.	140.	To Ernest Cooper, salary.....	125 00
Dec. 22.	141.	To Mrs. Clara Wood, salary.....	50 00
Dec. 22.	142.	To A. T. Painter, salary.....	50 00
Dec. 22.	143.	To A. I. Rembert, salary.....	83 33
Dec. 22.	144.	To Wm. Adams, salary.....	25 00
Dec. 22.	145.	To Wm. Williams, salary.....	25 00
Dec. 22.	146.	To Percy Adams, salary.....	20 00
Dec. 22.	147.	To Alex. Lewis, salary.....	20 00
Dec. 22.	148.	To Etta Bell, salary.....	10 00
Dec. 22.	149.	To Corrie Bell, salary.....	10 00
Dec. 31.	150.	To Southern Bell Telephone & Telegraph Co., phone service.....	9 99
Jan. 25.	151.	To J. T. McCaw, stamped envelopes, printing, etc.....	88 69
Appropriation			\$10,000 00
Expenditures			9,800 23
Balance			\$199 77
Outstanding Bills (?)			

INFIRMARY, TWO WARDS, DINING-ROOM, PUMPING PLANT, SEWERAGE DISPOSAL
SYSTEM FOR TUBERCULOSIS CAMP.

Apr. 23.	1.	To J. B. Campbell, digging well.....	157 50
May 5.	2.	To Record Publishing Co., notice—application for bids.....	6 25
May 5.	3.	To State Company, notice—application for bids.....	4 50
July 9.	4.	To H. J. Bassler Co., work on contract of building.....	379 06
July 9.	5.	To Wilson & Sompayrac, first installment on 5 per cent. commission..	1,340 60
July 9.	6.	To Harbeck & Heslep, payment on certificate of architects.....	3,189 94
July 26.	7.	To News and Courier, advertising.....	4 00
Aug. 6.	8.	To H. J. Bassler Co., work on contract of building.....	4,728 33
Aug. 6.	9.	To Harbeck & Heslep, payment on certificate of architects.....	3,627 22
Aug. 24.	10.	To Perry-Mann Electric Co., installing engine and pump.....	297 00
Sept. 5.	11.	To H. J. Bassler Co., work on contract of building.....	576 30

Voucher			
1918	No.		
Sept. 6.	12.	To Harbeck & Heslep, payment on certificate of architects.....	2,644 05
Oct. 3.	13.	To H. J. Bassler Co., work on contract of building.....	591 14
Nov. 13.	14.	To H. J. Bassler Co., work on contract of building.....	522 75
Dec. 8.	15.	To H. J. Bassler Co., work on contract of building.....	352 75
			<u>\$18,421 39</u>
Appropriation		\$20,000 00	
Expenditures		18,421 39	
Balance		\$1,578 61	
Outstanding Bills (?)			

PRINTING, STATIONERY AND STAMPS.

Mar. 13.	1.	To R. L. Bryan Co., stamped envelopes and stationery.....	28 65
Mar. 15.	2.	To W. H. Coleman, P. M., postage stamps.....	25 00
Mar. 31.	3.	To R. L. Bryan Co., envelopes, printing, etc.....	69 20
Apr. 9.	4.	To W. H. Coleman, P. M., postage stamps.....	25 00
Apr. 20.	5.	To Daggett Printing Co., printing.....	6 75
Apr. 30.	6.	To R. L. Bryan Co., stamped envelopes, etc.....	24 75
Apr. 30.	7.	To J. T. McCaw, postal cards and printed envelopes.....	56 00
May 8.	8.	To W. H. Coleman, P. M., postage stamps.....	23 00
May 19.	9.	To L. B. Blackwell, printing pamphlets.....	22 50
May 26.	12.	To J. T. McCaw, printing.....	44 00
May 24.	11.	To W. H. Coleman, P. M., postage stamps.....	25 00
May 26.	12.	To J. T. McCaw, printing.....	44 00
June 12.	13.	To W. H. Coleman, P. M., postage stamps.....	25 00
June 1.	14.	To W. H. Coleman, P. M., postage stamps.....	25 00
June 29.	15.	To Southern Medical Journal, reprints.....	16 10
July 6.	16.	To J. T. McCaw, printing.....	51 50
July 6.	17.	To Daggett Printing Co., envelopes.....	8 50
July 6.	18.	To Letter Shop, multigraphed letters.....	5 70
July 9.	19.	To W. H. Coleman, P. M., postage stamps.....	25 00
July 9.	20.	To W. H. Coleman, postage stamps.....	25 00
July 23.	21.	To J. T. McCaw, printed stamped envelopes.....	46 65
Aug. 4.	22.	To W. H. Coleman, P. M., postage stamps.....	23 00
Aug. 6.	23.	To J. T. McCaw, printing.....	4 85
Aug. 24.	24.	To W. H. Coleman, P. M., postage stamps.....	25 00
Sept. 14.	25.	To W. H. Coleman, P. M., postage stamps.....	25 00
Sept. 19.	26.	To W. H. Coleman, P. M., postage stamps.....	50 00
Oct. 31.	28.	To W. H. Coleman, P. M., postage stamps.....	40 00
Oct. 31.	28.	To W. H. Coleman, P. M., postage stamps.....	40 00
Nov. 12.	29.	To J. T. McCaw, printing.....	27 20
Dec. 27.	30.	To W. H. Coleman, P. M., postage stamps.....	36 35
Dec. 28.	31.	To J. T. McCaw, printing.....	89 30
Dec. 31.	32.	To W. H. Coleman, P. M., postage stamps.....	10 70
Expenditures		\$1,000 00	
Appropriation		\$1,000 00	

TRAVELING EXPENSES OF STATE HEALTH OFFICER.

Feb. 27.	1.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
Mar. 1.	2.	To Jas. A. Hayne, M. D., traveling expenses.....	77 10
Mar. 31.	3.	To Jas. A. Hayne, M. D., traveling expenses.....	42 25
Apr. 12.	4.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
Apr. 26.	5.	To Jas. A. Hayne, M. D., traveling expenses.....	44 80
Apr. 26.	6.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
Apr. 28.	7.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
May 23.	8.	To Jas. A. Hayne, M. D., traveling expenses.....	79 00
May 23.	9.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
June 4.	10.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
June 11.	11.	To Jas. A. Hayne, M. D., traveling expenses.....	89 15
June 30.	12.	To Jas. A. Hayne, M. D., traveling expenses.....	33 00
July 12.	13.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
Aug. 6.	14.	To Jas. A. Hayne, M. D., traveling expenses.....	51 75
Aug. 13.	15.	To Ticket Agent, So. R. R. Co., mileage book.....	40 00
Sept. 10.	16.	To Jas. A. Hayne, M. D., traveling expenses.....	62 95
Oct. 18.	17.	To Ticket Agent, So. R. R. Co., mileage book.....	44 85
Oct. 18.	17.	To Ticket Agent, So. R. R. Co., mileage book.....	20 00
Nov. 10.	19.	To Ticket Agent, So. R. R. Co., mileage book and war tax.....	21 60
Nov. 20.	20.	To Jas. A. Hayne, M. D., traveling expenses.....	81 20
Dec. 12.	21.	To Ticket Agent, So. R. R. Co., mileage book and war tax.....	45 20
Dec. 28.	22.	To Jas. A. Hayne, M. D., traveling expenses.....	27 05
Dec. 31.	23.	To Ticket Agent, So. R. R. Co., mileage book and war tax.....	43 20
Dec. 31.	24.	To Ticket Agent, So. R. R. Co., mileage book and war tax.....	43 20

Appropriation		\$1,000 00	
Expenditures		974 30	
Balance		25 70	
			<u>\$974 30</u>

EXPENSES STATE BOARD OF HEALTH.

Voucher No.			
1917			
Feb. 28.	1.	To W. J. Burdell, M. D., expenses to special meeting of Executive Committee	18 60
Feb. 28.	2.	To W. W. Dodson, M. D., expenses to special meeting of Executive Committee	40 60
Feb. 28.	3.	To D. B. Frontis, M. D., expenses to special meeting of Executive Committee	20 00
Feb. 28.	4.	To C. C. Gambrell, M. D., expenses to special meeting of Executive Committee	33 40
Feb. 28.	5.	To Robt. Wilson, Jr., M. D., expenses to special meeting of Executive Committee	38 00
Feb. 28.	6.	To W. M. Lester, M. D., attendance to special meeting of Executive Committee	4 00
Feb. 28.	7.	To Wm. Eggleston, M. D., expenses to special meeting of Executive Committee	30 60
Mar. 5.	8.	To Columbia Medical Society, State and County dues.	10 00
Mar. 5.	9.	To American Medical Association, subscription to Journal.	5 00
Mar. 10.	10.	To W. M. Lester, M. D., expenses to Colleton County, malarial investigation	59 60
Mar. 10.	11.	To Wm. Eggleston, M. D., expenses to Colleton County, malarial investigation	58 20
Mar. 10.	12.	To E. A. Hines, M. D., expenses to Colleton County, malarial investigation	87 10
Mar. 13.	13.	To W. J. Burdell, M. D., expenses to Colleton County, malarial investigation	67 60
Mar. 13.	14.	To C. C. Gambrell, M. D., expenses to Colleton County, malarial investigation	77 80
Apr. 20.	15.	To Robt. Wilson, Jr., M. D., expenses to annual meeting of Executive Committee	60 80
Apr. 20.	16.	To W. J. Burdell, M. D., expenses to annual meeting of Executive Committee	37 40
Apr. 20.	17.	To W. W. Dodson, M. D., expenses to annual meeting of Executive Committee	18 40
Apr. 20.	18.	To Wm. Eggleston, M. D., expenses to annual meeting of Executive Committee	52 40
Apr. 20.	19.	To D. B. Frontis, M. D., expenses to annual meeting of Executive Committee	38 80
Apr. 20.	20.	To C. C. Gambrell, M. D., expenses to annual meeting of Executive Committee	31 40
Apr. 20.	21.	To W. M. Lester, M. D., attendance to annual meeting of Executive Committee	30 80
Apr. 20.	22.	To E. A. Hines, M. D., expenses to annual meeting of Executive Committee	26 20
Apr. 20.	23.	To Drs. Bass & Johns, medical book.	5 00
Apr. 20.	24.	To McGraw-Hill Book Co., book, sanitary milk.	5 00
Apr. 30.	25.	To J. B. Lippincott Co., medical book.	4 50
May 15.	26.	To E. A. Hines, M. D., expenses to meeting of S. C. Association of Boards of Health.	16 00
May 15.	27.	To W. J. Burdell, M. D., expenses to meetings of S. C. Association of Boards of Health; meeting of sub-committee of Executive Committee of State Board of Health; trip to Cheraw, diagnosis of suspected infantile paralysis.	86 60
May 15.	28.	To Wm. Eggleston, M. D., expenses to meeting of S. C. Association of Boards of Health; meeting of sub-committee of Executive Committee of State Board of Health.	85 80
May 15.	29.	To C. C. Gambrell, M. D., expenses to meeting of sub-committee of Executive Committee of State Board of Health.	53 40
May 15.	30.	To W. W. Dodson, M. D., expenses to meeting of S. C. Association of Boards of Health.	8 00
July 11.	31.	To Wm. Eggleston, M. D., expenses to quarterly meeting of Executive Committee	27 20
July 11.	32.	To W. J. Burdell, M. D., expenses to quarterly meeting of Executive Committee	14 60
July 11.	33.	To W. W. Dodson, M. D., expenses to quarterly meeting of Executive Committee	40 60
July 11.	34.	To C. C. Gambrell, M. D., expenses to quarterly meeting of Executive Committee	33 40
July 11.	35.	To E. A. Hines, M. D., expenses to quarterly meeting of Executive Committee	42 60
July 11.	36.	To Robt. Wilson, Jr., M. D., expenses to quarterly meeting of Executive Committee	34 00
July 11.	37.	To D. B. Frontis, M. D., expenses to quarterly meeting of Executive Committee	16 00
July 11.	38.	To W. M. Lester, M. D., attendance to quarterly meeting of Executive Committee	4 00
July 27.	39.	To The American City, subscription to magazine.	3 00
Aug. 29.	40.	To C. C. Gambrell, expenses to special meeting of Executive Committee	33 40
Aug. 29.	41.	To Wm. Eggleston, M. D., expenses to special meeting of Executive Committee	29 40

1917		Voucher No.		
Aug. 29.	42.	To Robt. Wilson, Jr., M. D., expenses to special meeting of Executive Committee		34 00
Aug. 29.	43.	To E. A. Hines, M. D., expenses to special meeting of Executive Committee		42 60
Aug. 29.	44.	To W. W. Dodson, M. D., expenses to special meeting of Executive Committee		40 60
Aug. 29.	45.	To D. B. Frontis, M. D., expenses to special meeting of Executive Committee		16 00
Aug. 29.	46.	To W. M. Lester, M. D., attendance to special meeting of Executive Committee		4 00
Oct. 4.	47.	To W. W. Dodson, M. D., expenses to quarterly meeting of Executive Committee		40 60
Oct. 4.	48.	To Wm. Egleston, M. D., expenses to quarterly meeting of Executive Committee		29 40
Oct. 4.	49.	To C. C. Gambrell, M. D., expenses to quarterly meeting of Executive Committee		33 40
Oct. 4.	50.	To E. A. Hines, M. D., expenses to quarterly meeting of Executive Committee		42 60
Oct. 4.	51.	To Robt. Wilson, Jr., M. D., expenses to quarterly meeting of Executive Committee		38 00
Oct. 4.	52.	To D. B. Frontis, M. D., expenses to quarterly meeting of Executive Committee		16 00
Oct. 4.	53.	To W. M. Lester, M. D., attendance to quarterly meeting of Executive Committee		4 00
Dec. 5.	54.	To Wm. Egleston, M. D., expenses inspection of State Penal and Charitable Institutions		46 60
Dec. 12.	55.	To W. W. Dodson, M. D., expenses to quarterly meeting of Executive Committee		40 60
Dec. 12.	56.	To Wm. Egleston, M. D., expenses to quarterly meeting of Executive Committee		23 20
Dec. 12.	57.	To D. B. Frontis, M. D., expenses to quarterly meeting of Executive Committee		55 40
Dec. 12.	58.	To C. C. Gambrell, M. D., expenses to quarterly meeting of Executive Committee		33 40
Dec. 12.	59.	To E. A. Hines, M. D., expenses to quarterly meeting of Executive Committee		42 60
Dec. 12.	60.	To Robt. Wilson, Jr., M. D., expenses to quarterly meeting of Executive Committee		34 00
Dec. 13.	61.	To Lea & Febiger, subscription to Medical Journal		5 00
				<u>\$1,991 20</u>
Appropriation			\$2,000 00	
Expenditures			<u>1,991 20</u>	
Balance			8 80	
Outstanding Bills (?)				

